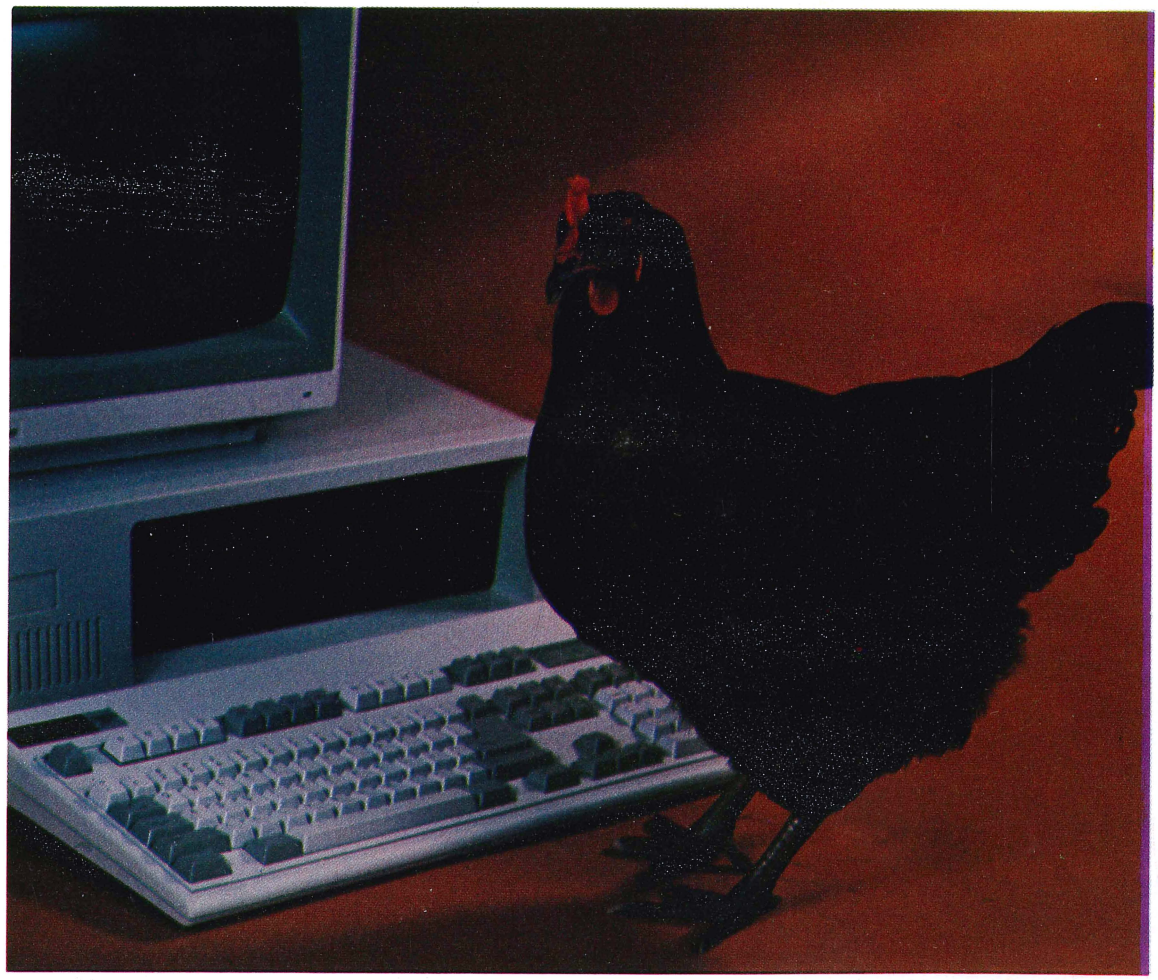
Exploring the

EPSON WORLD

Volume 2 Number 10-11
March-April 1987
$2.95
Cheap



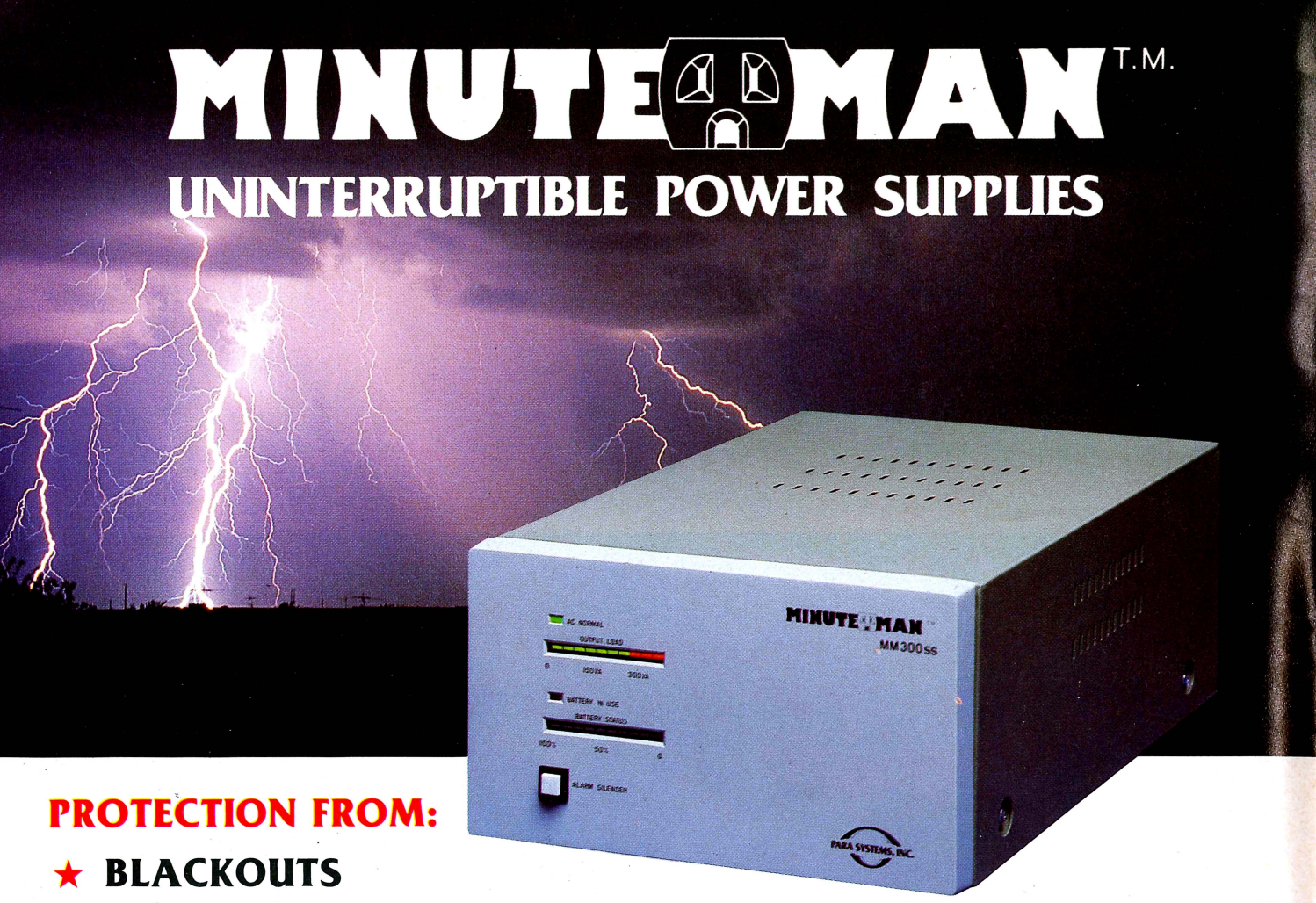
In this issue:

Public Domain Software
Publish a Cookbook
Making Effective Graphs
Speeding Up the QX-16

And some other good stuff...

MINUTEMAN T.M.

UNINTERRUPTIBLE POWER SUPPLIES



PROTECTION FROM:

- ★ BLACKOUTS
- ★ BROWNOUTS
- ★ INTERRUPTIONS
- ★ SPIKES
- ★ SURGES
- ★ EMI/RFI

EVALUATION PROGRAM

(30-DAY MONEY BACK GUARANTEE)

- Completely automatic operation
- From 1 msec to 4 msec switching time
- Audible and visual status indicators
- Order - ship same day
- Toll Free ordering
- Full one year warranty

MINUTEMAN 250	MINUTEMAN 300	MINUTEMAN 500	MINUTEMAN 1000
250 WATT (120V) STEPPED SQUAREWAVE	300 WATT (120V) SYNCHRONIZED SINEWAVE	500 WATT (120V) SYNC. STEPPED SQUAREWAVE	1000 WATT (120V) SYNCHRONIZED SINEWAVE
$359.00 Suggested Retail	$549.00 Suggested Retail	$699.00 Suggested Retail	$1399.00 Suggested Retail

Free! **Epson World subscription or one year extension with each purchase.**

Jalco Distributing
RFD #2 Box 539
Epping, NH 03042
(603) 679-2445

PARA SYSTEMS, INC.

1-800-238-7272

CP/M - Valdocs Disk of the Month

Try these babies on for size! This month we've got games! We've got utilities! We've got enhancements to CP/M and Bradford! Order now while supplies last!

The Game of Business (Valdocs/TPM Only)—Serious Entertainment. The commercial "Game of Business" program, recently reviewed in Epson World (January 1987) is now in the public domain! We're providing the program ready to run on the disk—no "libraries" to mess with. Innumerable hours of fun await you as you bankrupt your very own company without leaving the comforts of home!

EXPEX11.LBR (CP/M)—A CP/M Operating System Enhancement. EPEX adds much of the power and versatility of CP/M 3! Named directories, multi-command input, path-searching, RCP/M security provisions, user-friendly shells and more are provided in this simple-to-install package!

EXTRAFON.LBR (CP/M)—Printer Utility Supplement. Fourteen more super fonts for use with the exceptional BRADFORD printer utility originally featured on the September, 1986 CP/M Disk of the Month.

SETDRU13.LBR (CP/M Only)—Utility program. Specify and utilize different user areas on your drives when using programs that don't normally support user areas.

FXMASTER.COM (CP/M & TPM)—Printer Utility for FX/RX/MX printers. Includes multiple font selections, control of margin settings, line spacing and more.

SYSGEN.COM (CP/M A Only)—Utility. The standard "Sysgen" utility for CP/M 2.2A that Epson never distributed. Handy for CP/M enhancement programs like ZCPR that need SYSGEN during installation.

CRYP512.LBR (CP/M & TPM)—Utility. A fast data encryption program that protects and secures your files from unauthorized prying eyes and "hackers."

MS-DOS Disk of the Month

Here's a ton of great MS-DOS stuff. Order NOW!

MAPPER.ARC—This little tidbit maps out the complete 1 megabyte ram of your PC, showing the locations of DOS, Programs, where memory residents are hiding and such.

MEMORY.ARC—A collection of various memory utilities that will checks memory for bad RAM. Lets you watch memory in real-time and more!

POPSCL3.ARC—A nifty resident pop-up menu utility. Call up various programs, file handlers, printers, system information, etc., directly from the menu. Design the attributes of the POPUP screen in colors or monochrome intensity.

PMENU3.ARC—A memory-resident printer control utility. Control your printer parameters on the fly, even from within another program. Epson compatible printers only.

PC-DISK.ARC—A menu-driven disk catalog program written in Pascal. Many options and features. Will sort, print and save your comments about files on the disk. A very well written program.

PATCH.ARC—A file editor to change or modify DOS files. Shows HEX and ASCII info of files. Edit in Hex or ASCII. Uses function keys for ease of operation. Complete manual in the ARC file. Use this to learn about file structure.

NFD101.ARC—A Time/Date Utility that will let you change the date and time on your DOS files. Set dates on important files or record archiving dates.

K9.ARC—Control your computer by ALT key commands. Park the hard disk at the command line, put a clock on the Screen, etc. K9 can do about 25 things to your system.

LETRHEAD.ARC—A LOGO design program for your stationery or envelopes.

HELP.ARC—A very nice utility to make HELP FILES. You create the help text with any word processor; this file is automatically located by HELP and displayed on screen whenever you like.

LABLMSTR.ARC—A super menu-driven mailing label program with various options. You can configure labels to your specs, save to disk, design your own labels, make multiple copies, etc.

Epson World Disk of the Month
Box 369-New Boston, NH-03070

YES! Without a moment's delay, kindly send me copies of the March '87 Epson World Disks of the Month as indicated below at $15 each!

____ EW-10M (MS-DOS) ____ EW-10C (CPM-VALDOCS)

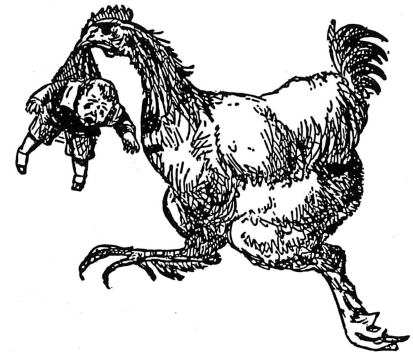
Check Enclosed _____ MC_____ Visa _____
Card Number:_____
Expiration Date: _____
Signature:_____

Name:_____
Address:_____
City_____ State____ Zip:_____

Epson World Disks of the Month sometimes contain public domain, freeware and shareware software. Your payment covers media, packaging, and production overhead, postage and handling.

Epson World

March-April 1987 Volume 2 Number 10-11



Articles

Valdocs + III Graphs Pack Power 4
How to make more effective graphs.

Use Your Home Computer to Write a Family Cookbook 7
Then you can get fat like everyone else.

Speeding Up Your QX-16 9
Just replace the engine.

MS-DOS Filename Extensions & Reserved Filenames 19
Just what you always wanted to know.

Cracking the Public Domain 21
How to unpack those library programs from disks.

The Official EW Disk of the Month Catalog 32
You've hounded us until we published it.

Departments

Write, Edit, Publish! 28
Musings.

Valdocs Chronicles 10
A few tips.

The Mail Bag 14
Our readers tell it the way it is.

Immortal Caption Contest 17
Some real knee slappers.

Reviews 11

Disk of the Month 1
A number of great inexpensive programs.

Finnegan's Flea Market 36
Classified advertising at its best.

After Hours

Publisher Faces Jail 31
Hansen is ready for some vacation at last.

Advertisers Index 3
Tell them we sent you!

From the Publisher 26

Editor
Jim Hansen
Managing Editor
Freida Day
Associate Editors
Lonny J. Brown
John Whiting
Consulting Editor
Stan Miastkowski
Advertising Coordinator
Judy Pursifull
Advertising Sales Director
Joe Lore
Circulation - Business Manager
Patricia Hansen
Business Services
Susan Hansen
Editorial and Business Offices
PO Box 369
New Boston, NH 03070
(603) 487-2500 (voice)
(603) 487-2501 (BBS)
(713) 486-8834 (Advertising Offices)

EPSON WORLD is published monthly by PJ Industries, Inc., PO Box 369, New Boston, NH 03070. Postmaster: send address changes to EPSON WORLD, PO Box 369, New Boston, NH 03070. Copyright 1987 by PJ Industries, Inc. All rights reserved.
EPSON WORLD is an independent publication of PJ Industries, Inc. and is not affiliated in any way with Epson America, Inc. Epson, HX-20, Geneva, PX-8, QX-10, QX-16, and Equity are trademarks of Epson Corporation.

Manuscripts and other editorial material are welcomed, but we assume no responsibility should they be lost. Subscriptions are $24.97 per year (12 issues); rates outside U.S. on request. Dealer inquiries invited.

Advertisers Index

Support our loyal advertisers!

Company	Page
AAA Liquidators	20
A1	18
Computer Connection	31
Disk of the Month	1
Dresselhaus Computer Prod.	13
Epson America	CIV
Green Tree Comp. Supplies	6
Green Tree Comp. Supplies	9
Homecraft	30
Independent Pgmrs Guild	12
Jalco	CII
James River Group, Inc.	15
Polytronics Corporation	35
P.R.O Systems	20
SemiDisk Systems	CIII
Star Technology Corp.	34
SnyderScope International	3

About the Cover

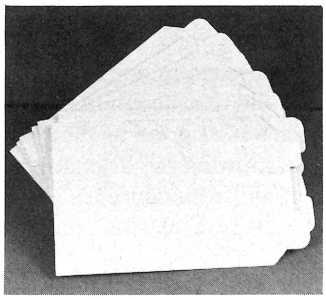
Lady Chicken checks out the Official EW Clone with attached DataDesk Turbo 101 enhanced keyboard. We've recently had the opportunity to try several different keyboards used in the PC marketplace, and have settled on this one as the one we like the most.

You'll find a number of interesting similarities between this keyboard and the QX HASCI. Two control keys, function keys (twelve of them) across the top, separate numeric and edit cluster. This keyboard has two "alternate" keys, next to the space bar. The touch is similar the HASCI keyboards, but different.

Despite similarities, the edit cluster layout is still hard to use by those who can or would touch type edit keys, and the edit function key area, if turned 90 degrees, would be much better for the same reason. Even so, in our view this is the best keyboard yet developed for the MS-DOS world; $149.95. DataDesk, 1-800-826-5398 (1-800-592-9602 in CA). It fits most clones except Epson Equitys.

Ripped Off Whenever You Buy Disk Mailers?

How much do you pay for those yucky disk mailers that you have to shred to open? A dollar? Two or more? Save a couple bucks and order these beauties from us. These are the same white ones used to mail our Disk of the Month orders. Much stiffer than the common expensive ones, these can easily be reused since the flap is reclosable, no glue. In seven months the post office has only managed to bend one... they must have used a vice to fold it in half before stuffing it into an apartment mailbox.



An obvious deal: Seven for $10 plus $1.00 postage and handling. Master Card and Visa accepted.

Epson World Magazine
Box 369
New Boston, NH 03070
603-487-2500

QX-10/16 HARD DRIVE
COMPLETE 20 MEG SYSTEM

$849.00

FULL ONE YEAR WARRANTY
Prepaid orders shipped free
Allow 3 - 4 weeks delivery

COMFILER UPGRADE TO 20 MEG
$400.00

FULL SUPPORT OF CPM/TPM/MSDOS

Comfiler Cast Systems Upgraded
To Comfiler 1510 Compatible

PRO SYSTEMS, INC.
10711 W. 63RD
Shawnee, KS 66203
913-631-2190

Valdocs + III Graphs Pack Power

The old saw about a picture being worth a thousand words is true; tables of numbers are more easily understood when shown in graphs. Valdocs DRAW makes graphing quick and painless.

By John D. Yoder

Graphs, even simple graphs, have surprising power. By making abstract data visual and by simplifying complex statistics, a graph is worth a hundred memos. I'm not talking about any of the numerous MS-DOS programs on the market, but the humble draw module that is part of Valdocs + II or III.

I discovered the power of Valdocs + graphs almost accidentally. In the fall of 1985 the college where I work as Director of Information Services recruited its smallest freshman class in 25 years, climaxing a skid that had dropped full-time enrollment from 1155 students in 1980-81 to 863 in 1985.

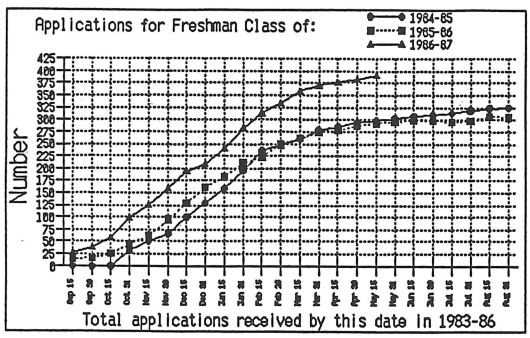


Figure 1: Applications for Freshman Class.

Naturally, we all watched freshman applications closely during 1985-86, to see if we would be able to reverse the five-year decline. Indications looked promising all through the winter and spring with applications running consistently ahead of the previous year.

Since I have difficulty visualizing numbers, I decided to make a graph comparing freshman applications at the same dates over the past three years. When I saw how helpful the graph was, I showed it to our Director of Admissions. He liked the graph and asked me to update it for the next meeting of the college's Board of Overseers.

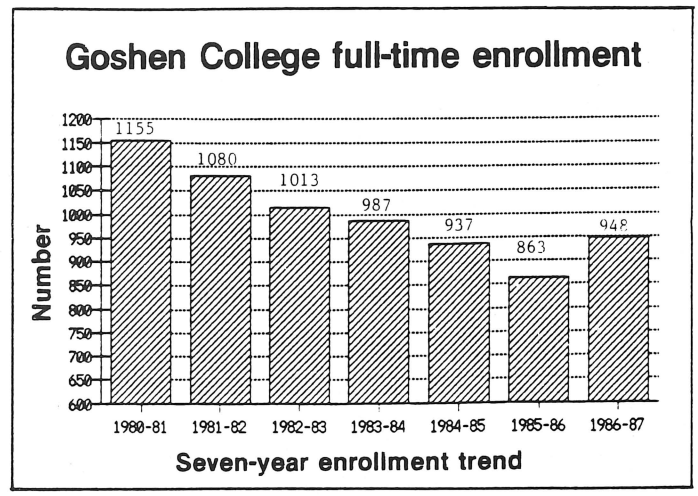


Figure 2: Full-time enrollment. This Valdocs graph was labeled with typeset lettering.

When he passed out the resulting graph *(Figure 1)* to the board, they were ecstatic. A hitherto calm meeting suddenly became electric. Clutch-ing the graph, board members made excited statements about the dramatic turnaround in enrollment they could foresee. (As it turned out, they were correct: freshman enrollment climbed 49 percent and overall enrollment 9.8 percent—*Figure 2.*)

Since that day I've created numerous graphs for the college's Registrar, Director of Financial Aid, Director of College Relations, the President and myself. People constantly ask me what program I use to create them, and I have to inform them that it's not made any more. Even though we have a VAX 11/780 and have dozens of IBM computers around the campus that *could* make graphs, no one has invested in the software that makes simple graphs better than Valdocs + II or III. (That either means my graphs are filling the need, or no one wants to learn one of the big MS-DOS programs, or both.)

Recently someone in our financial aid office told me that he could make a graph that was as good as the one I had made showing the dramatic rise in student aid from churches *(Figure 3)*. Our conversation went something like this:

"How would you do that?" I asked.

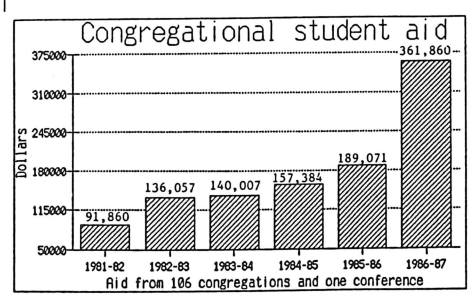


Figure 3: Congregational student aid.

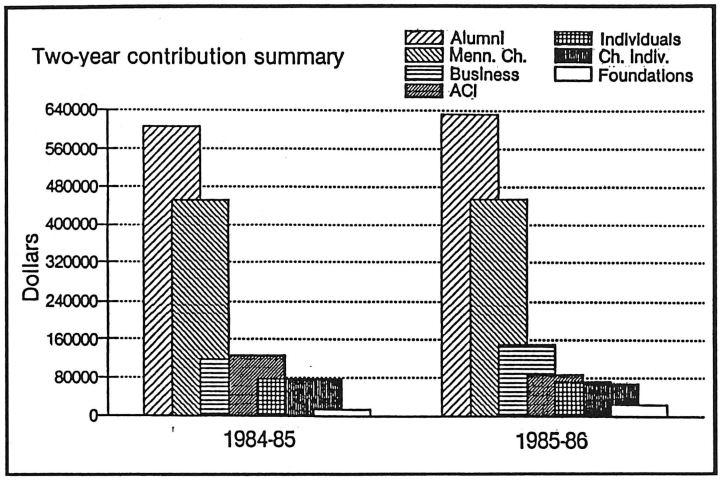


Figure 4: A side-by-side graph with typeset lettering.

"We have Lotus 1-2-3 now," he said.

"Have you ever seen a 1-2-3 graph?" I replied.

"Well, no," he admitted.

"Good luck," I said, "because I have and they're primitive compared to this one. You can invest in an add-on program that does spectacular charts using 1-2-3 data, but that's another couple hundred to reach this level." *(Ed. note: It's true; Lotus graphics are crude in comparison to Valdocs DRAW graphics, but unfortunately, LOTUS is a standard in business and therefore its graphics are acceptable.)*

It's now months later, and I have yet to see his first 1-2-3 graph.

Understand that the graphs I make are not made with Valdraw or Valpaint. That would take more time than I have and the results wouldn't be that great. No, for simple pie, bar and line graphs, Valdocs + DRAW produces graphs that are sharp, easy to use and communicate a ton of information.

What I discovered from the graphs I've made is that most of the people in our organization never thought about how graphs could help them communicate better--until they saw one of my graphs.

Yet any set of related figures is a candidate for a graph because figures are abstract and difficult to grasp. Put the same figures in a graph and they are much easier to understand: we see their significance because a graph simplifies relationships and makes them visual.

The Way to Enhance a Graph

After the graph is completed, you can make it more readable with several changes and additions. One of the things I've done to enhance the basic Valdocs + graph is add numbers at the tops of bar graphs.

Figures 2 and 3 are examples. *Figure 2* shows the full-time enrollment trend over a seven-year period. The original graph without figures above the bars was fine, but if someone wants to know exact enrollment figures, it is difficult to determine them from the graph itself. Even with horizontal lines across the graph and through the bars, you would have to guess at the precise figures.

I added the figures on a typewriter, after reducing the original graph 64 percent on a copy machine. That made the figures above the bars closer in size to the figures on the right side of the graph. Although it is possible to add these figures by passing the graph to Valpaint, using the typewriter was much faster. (Reducing the graph another 64 percent makes it exactly the right size for a two-column newsletter.)

Although I find the text produced by Valdocs + III acceptable (e.g., the top and bottom titles), it is one of the weaker parts of the draw module. I overcome that weakness by substituting typeset letters for the computer's letters in the titles at the top and bottom, legend and the label on the left side (see *Figure 2.*) Notice the difference between *Figures 2 and 3.* The top and bottom copy in *Figure 2* has been replaced with typeset lettering, rendering a very professional looking graphic.

I left the numbers up the side and the years below the individual bars in the computer copy in *Figure 2*, but not in *Figure 4* where they have been replaced with typeset lettering as well.

The time saved in making a hybrid graph of this type is still significant. Any graphic artist will tell you that it's drawing of the graph to scale that is such a royal pain; typesetting the words and figures is easy. I used the same approach with pie graphs showing expenditures and revenue in fiscal 1985-86: my graph with typeset letters to make them easier to read (*Figure 5*).

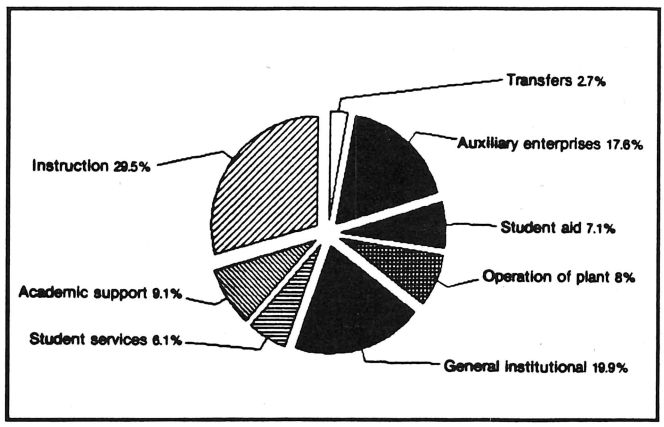


Figure 5: A pie chart using typeset lettering.

Incidentally, I find bar graphs in the side-by-side mode (like *Figure 4*) much easier to read than when the same figures are in a stack-bar graph. Stack-bar graphs work better if there are only two or three data fields to compare, or if you have more than three years to compare. With multiple

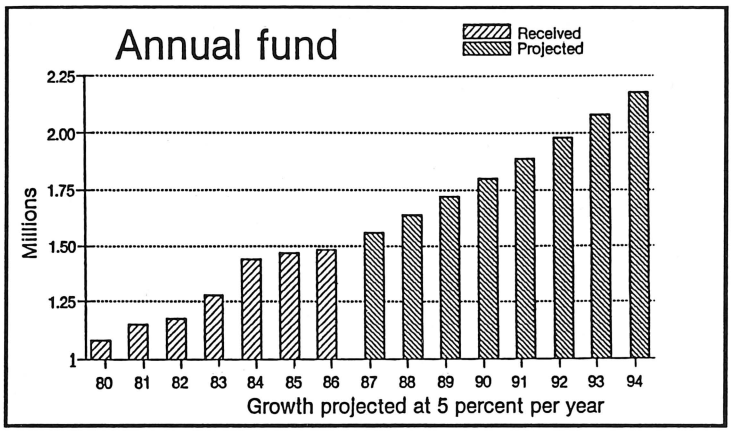


Figure 6: Chart showing pseudo side-by-side stacking.

years, the bars of a side-by-side graph become too thin to read.

Another trick I've learned is to make the bar graph work to project figures, like future contributions. *Figure 6* illustrates contributions to our annual fund received through 1986 and projected from 1987 to 1994. Normally the bar graph prints bars side by side, or stacked if you have several sets of data. I had two sets of data that did not occur at the same time, so I needed the bars to look different.

I created that effect by entering no figures in the "projected" data field for 1980-86 and no figures in the "received" data field for 1987-94. The result is a pseudo side-by-side graph, where one of the sides doesn't show up because no figures were entered for it.

I find that entering data directly in the graph program is much faster than importing it via the Valdocs+ spreadsheet. The numeric keypad makes data entry easy. The graphs also reproduce better in printed materials when I use the quad-density option in the Valdocs+ print menu.

The line, bar and pie graphs I've created look simple, and they are simple on a computer, but I didn't realize they were anything special to produce until the graphic artist in our office, who had done them in the past, was positively overjoyed not to have to do them for last year's annual report. Her reaction illustrates how most of us take the production of graphs for granted, not realizing that to create them manually is an arduous job.

The greatest weakness of Valdocs+ DRAW—besides the pipestem lettering—is that the printing is slow, particularly in the quad-density option. And since it doesn't spool like the editor does, it ties up your computer while it prints. I would love to see it have three-dimensional capabilities, but I'm reconciled to the fact that it isn't going to happen.

Obviously, Valdocs+ draw isn't in the same league with sophisticated graphics programs created for the MS-DOS world, but for simple bar, pie and line graphs, you don't need that power or expense. Experiment with the power of Valdocs+ III draw: I guarantee you will be pleasantly surprised with its capabilities.

Tech Tip

Having trouble with CPL when you first boot up? I've been there. When I press *Control U* it throws me into TPM, although it gives me the words it's loading into the module. When you receive the BO prompt, type RESTART and it will put you back into the editor, and from there on, *Control U* will bring up the CPL program every time, until you shut down. P.S.: you can make this whole process into a CPL program itself.

Col. Arion N. Pattakos
US Army (Ret.)
Kensington, MD

DISCOUNT DISKS

5¼" DS/DD **59¢** BOXED WITH TYVEK SLEEVES, LABELS, TABS, HUB RINGS

NOW AVAILABLE IN SIX COLORS, GREEN, RED, LIGHT OR DARK BLUE, MAROON OR GREY AT NO ADDITIONAL CHARGE. CERTIFIED ERROR FREE AT A STUNNING 75% ABOVE INDUSTRY STANDARDS. ITS 10 MIL JACKET IS 25% HEAVIER THAN ALL OF THE MAJOR BRAND JACKETS. THE BEST DISK WE SELL AT ANY PRICE.

Shipping $3 per hundred or part, APO, FPO, AK, HI, & PR add $6. Visa or Mastercard orders under $50 add $2. Orders under $30 add $3 serivce charge. Money orders, cashiers checks, and personal checks earn a 2% discount, but personal checks delay shipment for up to 14 days for clearance. New Jersey residents add 6% sales tax. We ship COD cash or certified check only for a $3 charge. Quantity discount 1%/300, 2%/500, 4%/1,000.

VISA

GREEN TREE

MasterCard

P.O. Box 249
11 Osage Road
Rockaway, N.J. 07866

COMPUTER SUPPLIES

(201) 627-9472
(800) 367-2897

Use Your Home Computer to Write a Family Cookbook

What started as a simple family project to keep in touch turned out to be a best seller! You can do it too!

By Patricia Schmidt

Your handy-dandy Epson computer is already hard at work in your home or business—you already know it can help you in your business, your financial paperwork, and your personal correspondence. But there're more creative uses for your Epson, and almost any interest or hobby you have can be enhanced using your computer.

My husband is a gourmet cook, and I am an avid cookbook collector. We spend many happy hours in the kitchen, trying recipes and cooking and tasting different kinds of food. We live in Europe, and have sampled many types of cuisine—the only problem is that we've collected so many recipes, they've begun to take over my kitchen!

As in other unorganized, hard-to-handle areas in our lives, I looked to the computer to help me out. In my search, I found a perfect way to keep track of all those recipes, and in buying a cookbook program, found many other uses for it, beyond the most obvious.

Soon we began to see how easy it is to publish your own Family Cookbook. All you need is your handy-dandy Epson computer, an inexpensive but powerful cookbook program, and a little elbow grease. You'll also need paper, layout sheets, scissors, and glue.

If you'd like to include artwork with your cookbook, you'll also need black and white pictures of food. You can use a book of cooking art, available at most larger graphic supply stores, or your own or a family members' drawings would add a sweet, homemade touch.

I use a book from the Dover Clip Art Series called *Food and Drink Spot Illustrations*, published by Dover Publications, Inc., 31 East 2nd St., Mineola, New York 11501. It costs $2.95, and includes pictures of everything from apples to a complete Christmas dinner. Simple, clear illustrations work best. If you're a computer artist, try using VALDRAW and VALPAINT!

It cost me about $250 to publish my cookbook, but you could do yours for free by dividing the cost among all contributors with the promise of a copy of the book. That way, it'll cost you nothing but your time.

My family cookbook emerged from my Epson QX-10 computer (with Titan's PC-2 board) using software from Virtual Combinatics called MICRO COOKBOOK. This program costs only $39 but is a powerful, easy-to-use program. It comes complete with approximately 150 recipes on two floppy disks.

Using MICRO COOKBOOK, you can also add, change, or delete your own recipes; sort recipes by name, ingredient or classification; print out shopping lists, and recipe, classification or ingredient indices; adjust recipe sizes; look for recipes without salt, sugar or other ingredients; or look up nutrient, metric equivalent, food storage or caloric guide information. It's a simple and elegant program that I wouldn't be without.

Starting Your Cookbook

I began by writing a letter to everyone in my family, asking them for about 10 recipes from five different food groups (main dish, dessert, side dish, appetizer and miscellaneous). I asked them to send only their family's favorite recipes, and told them to include anecdotes, comments and ways to vary the recipe—adding a nice personal touch. I bribed them to go to the bother of doing this by explaining they would each receive a copy of the finished cookbook, and that it would include recipes from the whole family.

I set a deadline, and two weeks before that deadline arrived, I sent out reminder cards that said "Please don't forget to send me your family recipes!" Almost everyone sent recipes, and the whole family buzzed about my newest "project." They wouldn't see the cookbook until it was unveiled at a large family picnic later that year.

Our cookbook included recipes from eight generations, and four extended families. The finished cookbook was 50 pages long, each page printed on both sides, 5-1/2 inches wide and 8-1/2 inches long. It's enclosed in a colorful three-ring binder. The hardest part is typing the recipes for your cookbook into your computer—a time-consuming chore, but necessary, as having them typed professionally is too expensive.

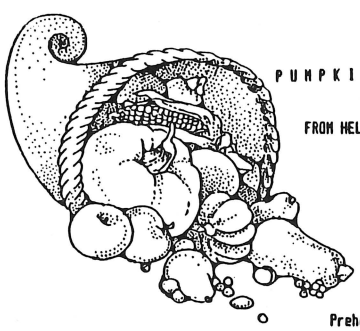
When all the recipes you want to include are printed or typed out, the next step is to divide them by category, i.e., appetizer, main dish, side dish, miscellaneous, soups and salads. Try to wind up with an approximately equal number in each category. Then, after neatly cutting each recipe out from the computer listing, arrange them in an eye-pleasing fashion on layout sheets, also available from a graphic arts store.

I used photographers' Spray Mount Adhesive to apply the recipes to the layout sheets. Spray Mount has an advantage over glue or paste because it will pull back up from the paper if you don't use too much. (Let it dry a minute before placing the copy on the page.) Add artwork where it seems appropriate. I didn't number the pages, but I did include a blank sheet of paper at the end of the recipe index, so users of the cookbook could add recipes of their own. After the title page, I included every contributor's name, address and phone; a handy reference guide for our family.

I printed 50 copies of the camera-ready pages at a quick copy business, costing roughly $150, including cost of cutting, collating and hole-punching. After printing, all you need to do is put the pages into binders or covers of some kind. The ring binders I used had two pockets on the cover, and cost about $2.00 each.

Use the accompanying guide to estimate what it would cost you to produce your own family cookbook. Add the costs, and divide the number of people who want a cookbook into your final figure. Collect that amount from each person, at the beginning if you need to, and at the end, when the cookbooks are ready, if you can. I gave mine out at a big family picnic where several of the dishes on the table were recipes from the cookbook.

You'll work at least 2 hours for every 10 recipes you plan to include in your cookbook. This estimate includes typing, layout and design, and finishing work, like stapling pages together. Family members could be recruited to help, reducing the time substantially. Good cooking!



PUMPKIN PIE PARSONS

FROM HELEN STILLEY PARSONS

QTY	MEASURE	PREPARED	INGREDIENT
4		beaten	eggs
1	tsp	ground	ginger
29 oz			pumpkin
1/2	tsp	ground	cloves
2	cups		brown sugar
2	cans		evap. milk
1	tsp		salt
2	tbsp		flour
2	tsp		cinnamon
2		unbaked	pie shells

Directions

Preheat oven to 425. Combine filling ingredients in order given, and pour into pie shells. Sprinkle with cinnamon on top. Bake 15 minutes at 425, and then reduce to 350 and bake for 45 minutes. Garnish with whipped cream and chopped walnuts if desired. If you'd rather, use 5 tbsp of pumpkin pie spice instead of the ones listed.
(Editor's Note:
A longtime favorite of all the Stilley's, Parsons, neighbors, husbands, kids, the entire town of Home Camp, PA., and anyone else who has had the luxury of a grandma who bakes pies like mine does!!!)

FANTASTIC COOKIES

Serves family Wilson

dessert

FROM KAREN WILSON

QTY	MEASURE	PREPARED	INGREDIENT
1	stick	melted	margarine
1	cup	graham	crackers
1	pkg		coconut
6	oz	chocolate bits	
6	oz	butterscotch	bits
1	can	sweetned cond.	milk
1	cup	chopped	nuts

Directions

Pour melted butter in 9 x 13" pan. Sprinkle crackers over margarine, and then coconut over crackers. Put chocolate bits over coconut, then add butterscotch bits, then pour sweetened condensed milk over that and last sprinkle nuts over milk. Bake for 20-25 minutes in a 350 degree oven. Cool in refrigerator and serve.
Quick and easy!

Figure 1 - A sample page from my cookbook.

Estimating the Cost of Your Production

Use the guide below to help estimate the cost of producing a cookbook or other publication. Cookbooks are always popular, so be sure to make extra copies for the inevitable people who didn't contribute, but can't stand being left out. (Charge them heavily for the copy you give them!)

Printing, Collating, Cutting, and Punching the number of pages you plan to produce:

Estimate 50 8-1/2 x 11 sheets on both sides; call your local quick-copy business for prices: $ _____

Mailing:
Letter asking for recipes
@ 22 cents per letter: $ _____

Reminder letter
@ 22 cents per letter: $ _____

Postage
For mailing publication: $ _____

Typing
If hired out: $ _____

Supplies:
Artwork
For illustrations $ _____

Paper
For copy layout, etc. $ _____

Scissors, Glue, Ruler,
And other supplies: $ _____

Layout Sheets $ _____

Binders, Covers $ _____

Miscellaneous $ _____

TOTAL $ _____

Divide the TOTAL by the number of contributors, recipients and extra copies produced (make plenty of extras!) to get unit cost of your production.

Speeding Up Your QX-16

Sick of sluggish operation? Plug in a V20 chip in place of the 8088 and watch the feathers fly!

By D. M. Jogalekar

I was electrified when I first read the discounters' ad about Epson QX-16 being offered at below dealer cost. I didn't know much about Valdocs but thought from the specs that it would be an good deal for the money, and it really turned out that way for me. Curiosity forced me to ask the dealer, "Have you tried replacing the 8088 with the NEC V20 in any of the QX-16s sold so far?" Surprised at my sudden question, he replied, "Oh, no! I haven't." His tone was challenging.

I ordered a couple of NEC V20s (just in case one was bad) and finally one weekend I got around to opening up my QX-16. I soon experienced how long it really takes to disassemble the QX-16, reach the CPU area on the motherboard, take out the 8088 and replace it with a V20.

The dealer's apprehension was not really unfounded! The only tools at my disposal were two Phillips screwdrivers and a set of Insertion/Extraction tools. You don't need anything else, but beware of static buildup on your body. Remove it frequently by touching the sheet metal inside the computer.

Swapping the V20 is simple. Just make sure the notched end matches the 8088s and all the pins are properly installed in the socket. Once the QX-16 is reassembled, it is ready to test.

ROM-BIOS and POST performed flawlessly. I inserted the MS-DOS disk and wow! the A prompt was there to greet me. Not only was the system faster, the inherent merits of V20 rapidly became apparent.
1. For QX-16, with a puny power supply of 55 watts, you need to conserve power if you want to add anything to your system. The V20 has very low power consumption.

The 8088 draws a maximum of 340 milliamps (according to Intel specs) compared to 40 milliamps at 8 mHz and 30 at 5 mHz typically drawn by the V20. The Intel 8088 dissipates 1.7 watts but V20 consumes only 0.135 watts. This difference may show up as a "make-or-break" situation on a hot summer day, if you have filled up all the slots. *(Ed. note: fill up the slots with what?)*

2. The advantage of CMOS chips (like the V20) is their relative immunity to supply voltage. CMOS products normally have a larger noise margin than the TTL, or even NMOS, and are less likely to be affected by supply voltage fluctuations and system noise.

3. The 8088 has 94 instructions, but the V20 has 101, which include 16 enhanced, 14 unique, and three special code instructions used in 8080 mode.

4. One more good feature of the V20 is its ability to run the CP/M programs without the slow 8080-8088 translator.

The real advantages of replacing 8088 with a V20 are cooler operation and zippier performance. You'll notice things running a bit faster than before.

Once your V20 is in place, the big question is how to compare the performance of the 8088 to that of the V20. I don't have any benchmark test programs to try out, but in some cases, there is a noticeable improvement. If anyone has done this already, please share your experiences.

(Ed. Note: As far as we know, the V20 works well in all QX-16s, but not all Titan boards will work with the V20; some do, some don't. You can order NEC V20 chips (8 mHz version) directly from us at $15 each plus $1.50 postage and handling. Epson World, Box 369, New Boston, NH 03070.)

YOU ALWAYS GET THE BEST FOR LESS FROM GREEN TREE

PEACHTEXT 5000	$39
WORDSTAR HASCI	$69
SPELLSTAR	$50
MAILMERGE	$40
WORDSTAR, SPELLSTAR, & MAILMERGE — ALL 3 FOR	$135
PERSONAL PEARL DATA BASE	$59
MULTIPLAN BY MICROSOFT	$55
dBASE II HASCI	$89
VALDOCS+III	$250
TITAL BOARDS WITH MS-DOS 2.11 and CP/M B2.25 SOFTWARE — 192K $325 - 256K $350 - 512K $525	
256K AUXILIARY BOARD	$185
EPSON MODEM CARD & CABLE	$52
UNIVERSAL CARTRIDGE INKER	$43
STANDARD CARTRIDGE INKER	$35
ALL COLOR INKS AVAILABLE — CALL	

Shipping $3.00 per hundred or part, APO, FPO, AK, HI, & PR add $6. Visa or Mastercard orders under $50 add $2.00. Orders under $30 add $3 serivce charge. Money orders, cashiers checks, and personal checks earn a 2% discount, but personal checks delay shippment for up to 14 days for clearance. New Jersey residents add 6% sales tax. We ship COD cash or certified check only for a $3.00 charge.

GREEN TREE

COMPUTER SUPPLIES

P.O. Box 249
11 Osage Road
Rockaway, N.J. 07866

(201) 627-9472
(800) 367-2897

The VALDOCS Chronicles

Lonny Brown, Editor

Est. 1986 *"We cared enough to wait for the very best"* Vol 1. No. 6

TIPS & BUGS

This month we present a bunch of tips and bugs discovered along the way. We encourage you to drop us a note with your discoveries.

• Pictures in VALPAINT can be stretched or thickened by retrieving them <T>ransparent, <M>ore than once. Use the cursor keys for precision enlarging.

• You can get extra small letters into a painting by writing your text in the EDITor, in the smallest cursor SIZE, then <P>assing it to VALPAINT (DRAW-P).

• For some reason, the Valdocs+ III EDITor gives a bogus reading on document size when a file is first brought up. When I ask for <A>vailable space, (CTRL-M-A), it invariably says that the Document Size is either 6 or 7 K, no matter how big it really is. To get an accurate reading, go to the end of the file (CTRL-Z) and ask again. Also, don't forget to <S>hrink your documents occasionally, for quicker editing, and before storing, to save disk space. Valdocs will not tell you in a nice way when you run out!

• When MAIL takes in files from the modem, it assigns a protection level of <3>, and prevents these files from being erased. To reduce the protection level to zero, exit to TPM (MENU-E), and at the A> prompt type:

A:\>prot B:filename.val<0>.

• If you're using CPL macro definitions at the CMOS RAM level, you might inadvertently wipe out the default set occasionally. This has happened to me enough times to make it useful to keep the definitions on the system disk, as CMOSRAM.CPL. That way they can be reinstalled quickly, rather than requiring re-writing them from scratch.

• My Valdocs+ III Spreadsheet crashes when Inserting a Block. Anyone else getting this bug?

• "Q-Notes" is a series of user notes and technical bulletins for Epson QX users. They are published by VALNEWS, an independent newsletter for QX users. For a complete catalogue, write XBK, 904 Irving St., Suite 271, San Francisco, CA 94122, ph. (415) 661-9270.

• Don't forget the <A>lternative Display mode in VAL-Index. It gives file sizes.

• Many QX's are now nearing four years old. Most have given excellent, trouble-free service (they're incredibly over-engineered). However, you should protect your investment with good preventative maintenance. Remember, local service and parts are going to get well-nigh impossible to come by. Some QX lovers are picking up used machines for spare parts.

Several of our advertisers provide complete service: **Star Technology Corporation**, 900 170th Road, Carbondale, CO 81623, ph. (303) 963-1969 buys and sells new and reconditioned QX computers. They also overhaul and completely refurbish disk drives and complete computers. **Computer Connection, Inc.**, 12 High St., Hampton, NH 03842, ph. (603) 926-2551 is a full service computer store offering a variety of new and used Epson products and full service as well. **A1 Computers, Inc.**, 268 Forest St., Pembroke, MA 02359, ph. (617) 293-7014 provides factory authorized service on most Epson products and sells a variety of interesting products including printers and non-Epson computers.

If you do need service or parts, I also recommend **NewCorp Products**, 45 Commerce Drive, Aston, PA, ph. (800) 345-8278. They repair all models of Epson computers and printers. If you call, tell them EW sent you, and maybe we can hook 'em for an ad.

Use a drive head cleaner once or twice a year. Most consist of cleaning disk and liquid solvent. *(Ed. Note: you can get the cleaning fluid by the quart from your local drug store. It is nothing more than straight* **isopropyl alcohol.** *Don't waste your money on a fancy bottle or box!)*

Some hackers advise getting four- or five-year-old floppy drive heads realigned before any signs of trouble. Also, carefully open the top and vacuum out the dust and spider webs. (Don't use the blower end of the machine—it makes a bigger mess, and blows dust from inside the vacuum cleaner into the computer). Remove the fan grill for better circulation. Don't pile papers on top of your CPU, they insulate heat inside.

QX CURE-ALL

A Valdocs User's Rescue Kit

Independent Programmers' Guild
Route 1, Box 34
Taos, New Mexico 87571
(505) 758-2361

Price $ 49.95

By Lonny J. Brown

QX CURE-ALL is a sophisticated little utility package offering a variety of document management and analysis aids for the hard-core QX writer. It can recover damaged files (evidently better than the emergency utilities provided with Valdocs), exhaustively analyze the contents of text documents, and shrink files for more disk space. It also has a drive head cleaning mode. Everything runs from and looks just like Valdocs. All HASCI control and application keys work (except HELP). The documentation suggests that you'll find the program so useful that you'll want to dedicate one of your less-used application keys to QX CURE-ALL, and tells how to set it up. Let's see if all the things that this editors' tool can do are really that necessary...

<S>HRINK DOCUMENTS: This function is the same as within VALDOCS (CTRL-M-S), but gives more information, such as space saved by shrinking. It works on any version of Valdocs data documents, INDEXed or NON-INDEXed.

<R>ECOVER DAMAGED DOCUMENTS: We've all gotten those dreaded error messages and lost valuable work to the mysterious black holes in Val-space. CURE-ALL's manual says, "Earlier recovery mechanisms in the Valdocs Editors were not as sophisticated as this one, and could damage a document in such a manner that important information and text could be lost forever." It recommends leaving the editor for QX CURE-ALL directly (through MENU), without even attempting recovery with the UNDO key, then runs an extensive search and repair operation on your damaged file, returning as much of it to memory as technically possible. I've had occasion to use it once, and it recovered my file with assurance, sacrificing only the last paragraph. It's the kind of tool you hope you don't need, but glad to have it when you do.

<D>OCUMENT STATISTICS: Not to be confused with file stats, (such as size in KBytes), document statistics analyze your work grammatically, by character usage, words, sentences, paragraphs, pages, and punctuation. It will show how many consonants, vowels, numerals, spaces, and short, medium, long and unique words you use; whether there are any unclosed quotation marks or parentheses; and a lot more. It then takes all this data and objectively rates your writing for "Readability," Reader Level, and a quantified literary assessment called a Fog Index.

QX CURE-ALL also generates a complete list of all words in the document, sorted alphabetically or by frequency of usage, or index them by page and line number. This function is useful for creating book indexes or glossaries, but not practical for docs over 50 pages, because of speed, disk space, and counter limitations. All generated information is storable as Indexed Valdocs files. The documentation is good.

The disk cleaning mode isn't much to write home about. It's supposed to run for 30 seconds, but mine wouldn't stop automatically, so I had to open the drive door to stop it. The utility causes the head to move across the entire available surface of the commercial head cleaner of your choice. Cleaning is recommended about once a year, or when data abnormalities show up.

According to QX CURE-ALL, the software review you're now reading has a Fog Index of 11.6 on a scale of one to 25. The higher the rating, the more difficult it is to understand. (Time magazine is said to come in at ten.) The Readability score is 47.8 on a scale of one to 100 (the higher the number the easier the doc is to read). The Reader Level of this article is 6.8, just under the average seventh grade level. I'm not certain how much of this kind of text analysis most writers need, but you can learn more about your work by using it. Fascinating stuff.

Software for your QX-10 and QX-16!

The Independent Programmers' Guild publishes application, educational, game and graphic software for your Epson QX computers. Select from a growing list of titles.

*Bookmaker * First Edition * Early Learner's Series * Transmaker * QX-CUR-ALL * SongWriter * WordMeister * 2 Can Play Chess*

We have nearly 20 titles in stock and more are on the way! For a copy of the current catalog or more information about the IPG, call or write today.

Independent Programmers' Guild
Route 1 - Box 34
Taos, New Mexico 87571
505-758-2361

Good Stuff

Send us your tips and tricks, we'll send you a free DOM of your choice when it is published.

Epson World Magazine

BOOKMAKER

A Desktop Publisher's Toolkit

Independent Programmers' Guild
Route 1 - Box 34
Taos, New Mexico 87571
505-758-2361

Price: $49.95

Here's another "desktop publisher's toolkit" by Dan Oja, originator of FIRST EDITION!, CARDSHOP, and other IPG goodies designed for and on the Epson QX machines. It's highly graphic, incorporates the QX-HASCI control keys, and is simple and fun to use.

BOOKMAKER puts any combination of graphics and text into folded booklet form. It's ideal for home, school and small business uses, such as instruction manuals, conference programs, product catalogs, or any multi-column, multi-page booklet up to 26 pages long.

While FIRST EDITION! creates 8 1/2" x 11" "newsletter"-size pages, BOOKMAKER's product is a 5 1/2" x 8 1/2" pamphlet, which it makes by printing sideways, on both sides of the paper (you run it through the printer twice), and numbering the respective pages for folding and joining. It works with FX or RX printers, but not MX. With LQ series printers it requires 14-inch paper.

BOOKMAKER accesses the screen/page like a painting: user-defined areas can accept text from a file, or the keyboard, or pictures from the included PIC library, or from VALPAINT or RSI BASIC. Areas can also be block-moved, erased, or stored for later retrieval. (Although both programs use the same .PIC-tures, the exchange is not two-way, because BOOKMAKER pages are too large to retrieve into VALPAINT.) BOOKMAKER will not work on color systems.

When the BOOKMAKER system disk is used to boot up, it installs its own special "newspaper" font (created in Valdocs MATRIX). If you invoke the program from the MENU of applications, it writes in the normal Val-font. When inputting a previously-written text file, a variety of typestyles are available under the usual QX type style keys. When typing directly from the keyboard, five sizes are possible, the largest being 5/16" tall. If you have Valpaint you can create even larger headlines for transfer into BOOKMAKER pages. Printing can be normal, or extra dark. Automatic page numbering can be turned on or off.

Text for your booklet can be written with the Val-editor or any other word processor that can output a straight ASCII.DOC file, including Peachtext. When composing your pages up to three "open" files can be used at once. BOOKMAKER will keep track of where you are in each, and "close" a file when it's been completely emptied onto the page. To satisfy your specified column width, BOOKMAKER automatically prompts for hyphenation. Documents must be non-justified. One 360K disk can hold 20 BOOKMAKER pages.

If you have use for it, this is a neat little program you'd be glad to see on your QX. The printed output is obviously home computer–made, but for the right applications, no apologies are necessary. A useful communications tool.

HOTLINE

Cheap Telephone Power

MS-DOS systems. (The dialer will NOT work on QX-16.)

General Information, Inc.
401 Park Place, Suite 305
Kirkland, WA 98033
(206) 828-4777

Price $29.95

By Stan Miastkowski
Consulting Editor

As a writer by profession, I spend a great deal of time on the telephone tracking down information. The receipt of my monthly telephone bill is always an eyebrow-raising experience; but what's particularly annoying are the charges that add up for calls to long distance information–at 75 cents a crack. Because I make calls all over the country, I certainly can't keep hundreds of telephone directories around. Then I got HOTLINE, a $29.95 program that's paid for itself many times over.

Hotline is an electronic telephone directory and automatic dialer that has built into it the telephone numbers of over 2000 major corporations, government agencies, and institutions. It also has reservation numbers for airlines, rental cars, etc. Now 2000 names may not sound like many when you consider the tens of thousands of names that appear in a typical local telephone book. But 2000 is plenty. All the major corporations are in the directory along with relatively obscure groups.

To find a listing, you pop up the national directory menu and type in the name of the organization you're looking for. Don't worry about using exact case or typing the whole name. Hotline is smart enough to look for a close match. The first thing I looked for was AFTRA (the American Federation of Television and Radio Artists). Sure enough, it was there.

Once Hotline highlights the number, all you need to do is press return and it'll dial the number through your modem. It's a quick, useful, and easy-to-use dialer. But Hotline is also full of neat little touches that add to its value. For instance, I live on the East coast and often call the West Coast. But I'm absent-minded enough to forget to check the time difference. I'm always calling too early or during somebody's lunch hour. With Hotline there's no problem. Hotline knows which time zone I'm calling and shows me what time it is where I'm calling.

But Hotline can be a valuable tool even if you seldom call major companies or institutions. You can easily create your own custom telephone

directory using your word processor or database and then use one of Hotline's built-in utilities to compile it into a pop-up personal dialing directory. If you have lots of friends, you can make a personal directory with up to 65,000 entries. You use your personal directory just like the national directory. Hotline will find the number you want as soon as you enter the first few characters of the name.

There's also a "speed dial" directory where you can store thirty of your most-frequently-called telephone numbers. When you pop up your speed dial directory, Hotline will automatically dial the number you chose by pressing a function key. You flip among the three groups of ten by using the [Pg Up] and [Pg Dn] keys.

As the late-lamented Ginsu knife ads used to say, "Wait, there's still more." Hotline will find the location and local time for any area code or let you browse through a list of every area code within a state. Then there's the keypad dialer that lets you enter a number via your computer's keyboard. As soon as you enter it, Hotline tells you *where* you're calling and what time it is there. If you ever get messages with a name and number, and haven't the slightest idea where you're calling, this feature is incredibly handy.

There's also a "cursor dial" feature that will find and dial any number that's displayed on your computer screen in a document or database. It works the other way too; a "paste log entry" feature takes the log entry out of your directory and pastes it into an application program you're working on.

I've saved the best feature for last. If you wish, Hotline will keep a log of all the numbers you call, what time you made the calls, and where you called. The log is kept in a file that you specify and can be called up to peruse at any time. It didn't take me long to get used to making all my calls from the keyboard so that they're logged. Besides the obvious utility of comparing your calls with Ma Bell's bill, having a record can be invaluable. Because the log is kept in a standard ASCII file, I've gotten into the habit of calling up the log from my editor and making notes about the substance of the call. It's a handy memory jog if you're calling someone back later, and it's impressive to be able to remind someone about what they said 3-4 weeks ago, especially if they claim they have a sieve-like memory.

As you might expect, Hotline is memory resident. But the actual resident part of the program is a relatively small kernel that calls up the directories that are kept as separate files. (The actual amount of RAM it takes up depends upon which features you choose.) There's a setup program that lets you choose your features. You also have to tell Hotline about your area code and local exchanges. It can be set up for pulse or tone dialing, a variety of Hayes-compatible modems, and will even work through a PBX office system.

Hotline is a tantalizing hint at very useful products to come. It's the first product from General Information, a Kirkland, WA-based company that was formed two years ago by Dick Brass, who developed the first electronic thesaurus. The company has purchased rights to the *National Directory of Addresses and Telephones Numbers,* which contains some 160,000 names. Hotline's directory is a very small subset. A company spokesman says they'll be many more products based on the National Directory. They've also bought electronic rights to the World Almanac. Who knows what the future holds?.

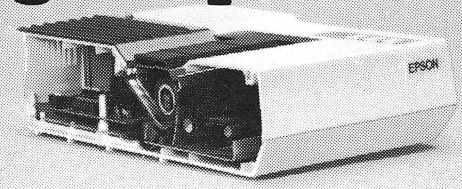
But in the meantime there's Hotline. It's a low-cost program that nicely answers that all-too-common question of "what can your computer DO anyway?" And for $29.95, it's a real steal.

Attention all FX80, FX100, JX, RX, & MX owners:

You already own half of a great printer

Now Only $79.95

Dealer inquiries welcome.



Now for $79.95 you can own the rest. You see, today's new dot matrix printers offer a lot more.

Like an NLQ mode that makes their letters print almost as sharp as a daisy wheel. And font switching at the touch of a button in over 160 styles. But now, a Dots-Perfect upgrade kit will make your printer work like the new models in minutes— at a fraction of their cost.

And FX, JX and MX models will print the IBM character set, too.

So, call now and use your Visa, MasterCard, or AmerEx. Don't replace your printer, upgrade it!

1-800-368-7737

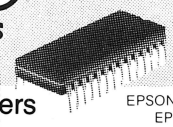
In California: 1-800-831-9772

Sample of letter with Dots-Perfect

Dots-Perfect™

Dresselhaus

Sample of letter without Dots-Perfect



837 E. Alosta Ave., Glendora, CA 91740 Tel: (818) 914-5831

An upgrade kit for EPSON FX, JX, RX, & MX printers

EPSON is a trademark of EPSON America, Inc.

The Mail Bag

Thanks for the January issue. I especially appreciated the article on maintaining a QX. I'd like to see some of these topics discussed:

- An article explaining how each edition of EW is produced. As a professional typographer getting more and more involved in desktop publishing techniques, this would be of great interest to me. Just looking at the type quality and the way the graphics in the advertising are used, I'd guess you are using some sort of laser printer.

- A listing of available back issues, especially your Disks of the Month. You could put it back in the "Finnegan's Flea Market" using 8-pt. type. Those of us who are interested would take the time to review the "mouse" type.

Finally, do you know of a disk drive diagnostic test utility to check the QX drive tracking, alignment, motor speed, etc.? If so, where can I get a copy?

James A. Hoehn
Appleton, WI

We'll probably run an article some time later about how we produce EW, although it might prove embarrassing to us if we told you how little it takes.

We've had many requests for a "catalog" of back DOM issues available, and so you'll find it in back of this issue, 8-pt type and all. Although you can find diagnostic disks for almost every other system, I've not seen one available for the QX computer. Does anyone have information on this one?

I have a problem I hope someone can help me with. I'm using an FX-185 printer with Valdocs + III. When printing in the NLQ mode the letters come out fine, but underlining is done in DRAFT mode, as you can see. Never had this problem using Valdocs + II; underscoring came out as a solid line. Is there a fix for this?

Jerry Onyszczak
(No return address enclosed)

Perhaps some of our readers could help you better, but from what I know, what you see is what you get. Valdocs + III dropped a lot of printer support, especially for the LQ series in regard to justification. Most readers that need better printer support are composing and editing in Valdocs + III, then breaking down and printing in Valdocs + II, a sad commentary on Valdocs + III.

At one time we had 49 QX owners here in Micronesia, Saipan and Guam. I am not sure how many are actively using QXs now because a user group was never formed. I primarily use Valdocs 2.03, Personal Pearl and Home Accountant Plus. So far all this does a fine job for me, but as you say, there is a migration to MS-DOS, so your future issues will help me there.

Here's a tip for anyone living or visiting the tropics you might like to pass on. The humidity is so high here that tiny patches of mold and water spots form on the magnetic surface. This loosens the diskette medium and accumulates on the heads, eventually giving disk R/W error messages. I have avoided these problems by keeping my disks in a box heated by a 15-watt light bulb (it keeps them dry) and by cleaning the disk heads once a month.

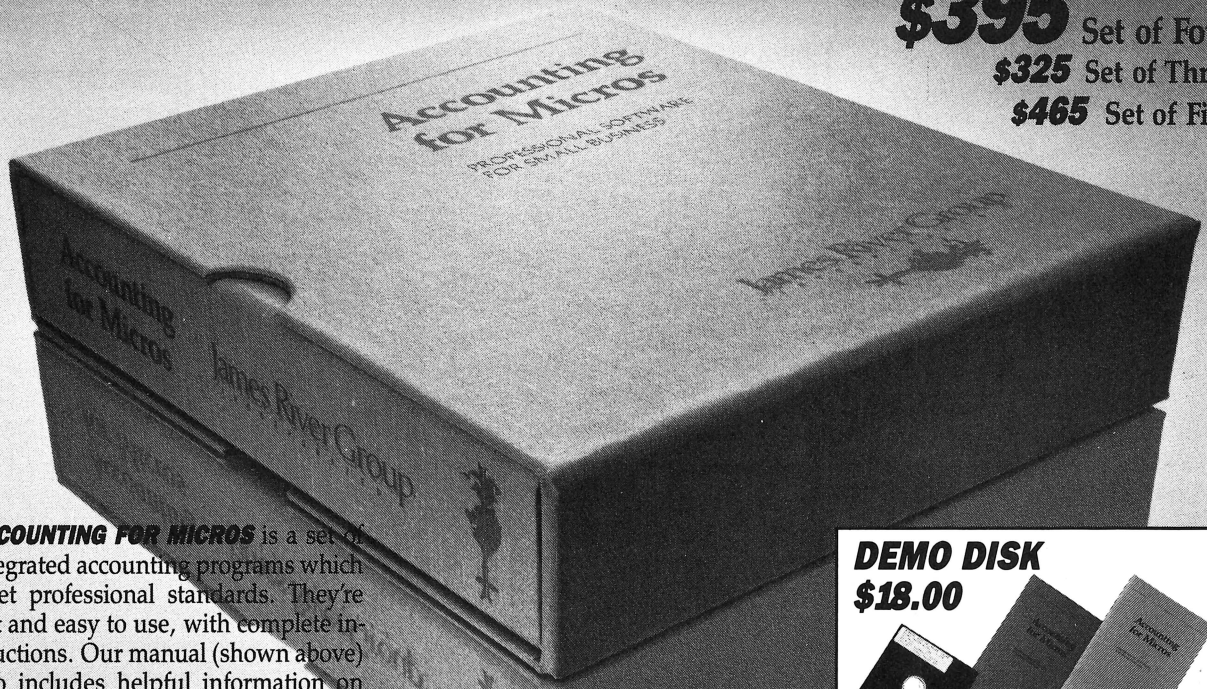
Paul S. Tobiason
Aqana, Guam

Thanks for the tip, Paul. Your heated box suggestion is good for use in any damp climate. We'll be sending a FREE disk of the month for this suggestion.

The Ability article by Lonny Brown was very encouraging. I have recently been looking at IBM clones, thinking that one day I'll have to get one if I am ever to use project management software. The big deterrent has been the lack of software as satisfactory as Valdocs and a display as good as the QX-10 monitor. Although there was no mention of color displays with Ability, I assume that it will work okay if the computer had an EGA (Extended Graphics Adapter) card and a high resolution monitor. After seeing QX-10 color and EGA

ACCOUNTING FOR MICROS

$395 Set of Four
$325 Set of Three
$465 Set of Five



ACCOUNTING FOR MICROS is a set of integrated accounting programs which meet professional standards. They're fast and easy to use, with complete instructions. Our manual (shown above) also includes helpful information on bookkeeping and computers.

GENERAL LEDGER $125
Allows up to 1,000 accounts & 1,000 transactions/month. Retains mo/end balances for Last year, This Year and Forecast. Includes Cash Disbursements, Cash Receipts and General Journals. Reports include Balance Sheet, Income Statement, Annual Summaries and Journal Reports.

ACCOUNTS RECEIVABLE $125
Allows up to 2,500 customers and 1,000 invoices per month. Invoicing can access Inventory Module. Keeps customer names and addresses. Invoice prints on plain paper or any pre-printed form. Statements can be printed at any time.

INVENTORY $125
Allows up to 4,000 parts. Keeps 3 month history of unit sales as well as year to date. With AR, can be used as point of sale system (prints invoices, handles cash). Reports include Inventory Value and Stock Report, Internal and Customer Price List.

ACCOUNTS PAYABLE $125
Allows up to 500 vendors and 600 invoices/mo. Records invoices and hand-written checks. Prints computer checks on any pre-printed form. Keeps vendor names and addresses.

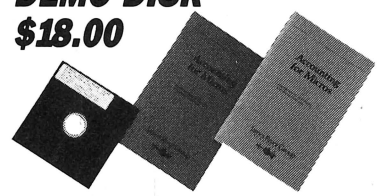
PAYROLL $125
Will handle up to 100 employees with six deductions per employee. Deductions may be determined as fixed dollar amounts or percentages, or referred to a table for automatic look-up. Tax tables are easily entered, or purchased separately.

SET OF FIVE $465
SET OF FOUR $395
SET OF THREE $325

RUN ON MOST CPM AND MSDOS

Apple CPM	*IBM PC,XT,PC jr,AT*	*Sanyo (all)*
Columbia	*Kaypro (all)*	*Tandy (all)*
Compaq	*Morrow (all)*	*TeleVideo*
Corona	*Osborne (all)*	*Zenith 100 & 150*
Eagle (all)	*Panasonic*	*8" CPM*
Epson QX-10	*Radio Shack CPM*	*Other compatibles*

DEMO DISK $18.00



Try all 5 programs above (GL, AR, AP, IN, PR). Order our DEMO DISK for $18.00 (includes shipping). Condensed versions of the programs give you the "feel" of data entry and access. Includes sample reports and instructions. Specify machine.

TRASHMAN (NEW) $145
The "Catch-All" program. Files any type of information for quick access. Name or subject oriented with 15 lines of notes per name. Use TMAN as a mailing list, filing system, notebook, etc. Can be used alone or with data from our other programs.
Try ***TRASHMAN (only) DEMO $16***

HOW TO ORDER: Please specify machine and disk format. You can pay by check, by VISA or MasterCard (we need your expiration date and card number), or by UPS COD (add $2.50 COD charge). Our price includes shipping. Minnesota residents, add 6% sales tax). We ship most orders the same day.
or ***ORDER BY PHONE: 612-339-2521***

James River Group
INCORPORATED

(612) 339-2521

125 North First Street
Minneapolis, MN 55401

on the IBM, I wouldn't settle for less. Will the EW Clone support this?

Dick Garrett
Sumter, SC

The Ability software does support color. I generally advise against color. Reason? It makes for very attractive screens, but when you have to work with it for any length of time, the color changes from one place to the next on the screen become quite tiring for your eyes. Further, not many programs use color other than to make a "snazzy" display; and there aren't any cheap ways of getting good color on paper—so you're talking about a lot of money for mostly gee-whiz visual effects. How much money? Good EGA monitors retail for about $600-$700, and the cards that drive them something over $300, generally. And there are still compatibility issues being struggled over. The EW Clone will of course take EGA cards and monitors, but you'll nearly double the cost of the system. For the most cost-effective productivity, use a standard "Hercules-compatible" monochrome display, standard in the EW Clone.

I got the BRADFORD program on the September Disk of the Month and so far have not been able to use it. I wrote the author for a copy of the manual mentioned in the BRADREAD.ME file, but my letter was returned with no forwarding address. Can you help?

E. A. Quasebarth
Encinitas, CA

I looked over the listings you sent with your letter and found you were trying to use BRADFORD on a Valdocs file. That's a no-no! You must first save your Valdocs files in the ASCII format using the CTRL-Q menu before they can be used. Things work much better that way! Apparently Concom has moved or discontinued operations. Anyone know how to contact them?

I have a present problem and one that seems imminent. My green screen monitor (Model 0602A) for the QX-16 has gone to a kindlier place and the repairman is not certain it can be repaired. I anticipate problems with my QX-10 monitor. Can you tell me what other monitors can be used with the QX-16?

Jules Salkin
Los Angeles, CA

I've heard of people connecting NEC multisync monitors to the QX-16, but that is overkill; the monitor probably costs as much as you're likely to pay for the computer these days. If you can't get local service, contact Star Technology Corp., one of our advertisers. They should be able to help.

I have finally straightened out a fiasco with ValWare, and can only echo other's caveats that they be dealt with on a C.O.D. basis, and have also filed the requisite papers with the bankruptcy court in California, claiming $150, half the cost of the promised Val-Done.

By the way, I am happy to support Alan Magary of ValNews in San Francisco. He's published some very useful stuff for us.

Waldo Lydecker
Westhampton Beach, NY

On November 6, 1986 I ordered Valdocs+ III ($149.95) and an Epson color board and monitor ($758.95) from ValWare Distributors on my credit card. This amount was billed to the credit card on Nov. 7.

After certified letters to both Steven B. Kray and Randy Hurtado and several phone calls, I received Valdocs+ III on January 5, about two months after being charged for it, and the same month it was reduced in price by $49.95.

I have still not received (as of February 2) the color monitor and board. The balance ($605) is in dispute at the bank and likely to remain so. Mr. Hansen, I loathe anything with the name "Epson" on it, but I am renewing, much against my better judgement.

Beardsley Graham
Bend, OR

Once again, we recommend doing business with ValWare only on a C.O.D. basis or via credit card. We plan on changing the name of EW to something else real soon now, which should please Beardsley. We can otherwise only comment favorably on his staggering intellect which has allowed him to make the proper decision (i.e., renew) while his very soul was rent asunder by the impropriety of the aforementioned merchant.

I was profoundly shocked by the depraved statement on the December cover wrap advocating that the reader take EW to bed. First R-rated movies, now this! What is happening to the moral fabric of this country? What about the poor lonely programmer who spends all his waking hours before the screen? What if he yielded to your urgings and stopped producing benefits for our society? Disgusting! Enclosed is my renewal. All I'm interested in is the cover; the inside of the magazine is only stuff about computers.

Robert Schick
Northridge, CA

We merely reported that you don't need to read EW to get the full benefit if you take it to bed; consider it an option. I'm sure the world would be a better place to live if all programmers read EW; your concerns are totally unfounded, sir.

Gadzooks! I find that I am one of the laggards who had not renewed his subscription to your journal. Abject apologies!

Jon M. Aase, M.D.
Albuquerque, NM

All is forgiven. (We only charge $24.97 for each forgive.) Everyone, please note your expire date on your mailing label. We don't send out renewal notices, trusting in your fair intelligence to renew by yourself, knowing that you'll pay a grim price if you drop the subscription.

I urgently need a copy of a disk with the Comrex CR-1 printer setup to run HASCI WORDSTAR, along with information on the proper dip switch settings for the QX-16HD. Although Epson made all this equipment, they haven't been able to supply me with this information.

R. D. Terry
3903 Abril
San Clemente, CA 92672

Any readers who can help should respond directly, with our thanks.

Please help. I need to be able to change some keyboard definitions (namely, the arrow keys) when using MS-DOS on my QX-10/Titan. Titan Technologies has not responded to any of my letters. Can anyone tell me how to do this?

By the way, for those having trouble with Lotus 2 (and 2.01), buy the Unlock Album from Lotus. It works great. I've been using Q&A and love the word processor. Easy to use the first time, like Valdocs. The only thing it won't do is allow single and double spacing in the same document. New margins are beautiful.

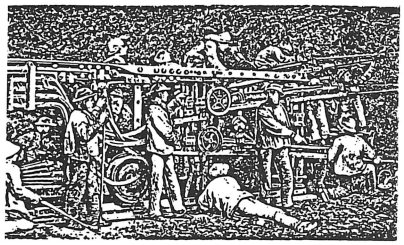
Name omitted at author's request
Orland Park, IL

Sorry, can't help you here. Have any of you readers redefined keys when using the Titan board?

I am not a magazine freak and more often than not don't have the time to read the other two that I receive. The exception of course is EW! I find great comfort knowing that I am not the only crazy who enjoys using my QX-Comfiler-FX 100 combo.

But there are days when I gasp with anxiety fearing that the technology sitting on my desk has become a liability. Nothing turns my head faster than a good looking CRT and a slick set of disks. Sorry, but that's the way it is. As long as I'm able to leave the store alone, I'm ok.

What do I really do? Write letters, do CompuServe once in a while, paint and draw occasionally, use Checks & Balances for the business books, run HASCI-ized dBaseII for a bunch of other stuff and Family Roots for the



The Winner!

This month our congratulations go to Richard Gerace of Cranston, RI: **"Listen up guys! This is the Valdocs button, this is the CP/M button, this is the MS-DOS button and this doohickey flushes the john."** We'll send Richard a free disk of the month of his choice for his effort. Thanks, Richard!

Here are some of the runner-ups; there isn't room to print all we'd like to:

Roger Kearney, Yorba Linda, CA: Yes, but can it compute?

Bob Oullett, Plympton, MA: "Now let's clean the left disk drive."

Dick Garrette, Sumter, SC: "Version 1.0 of anything is crude, and this VMAX-Valdocs project is no different!"

Immortal Caption Contest!

Come up with the best caption for this picture and win a **FREE** Disk of the Month! Put on your thinking cap, let your experience and imagination stew together, then jot down your entry and send it to the Immortal Caption Contest, **Epson World Magazine**, Box 369, New Boston, NH 03070.

EPSON

AUTHORIZED
SERVICE
FOR
ALL PRODUCTS
IN OR OUT OF WARRANTY
DEALER RATES AVAILABLE

Dots-Perfect	*$79.95*
Logi Tech Mouse	*$99.95*
Valdocs + III	*Write*

FAST TURN AROUND
EXTENDED WARRANTIES
COMPETITIVE PRICING

A-1 COMPUTERS INC.
268 Forest St.
Pembroke, MA 02359

(617) 293-7014

PIBTERM
for the
QX-16!

This two disk set provides complete documentation (about 64 pages of it!) and a high quality **MS-DOS** telecommuncations program which has had very favorable reviews. PIBTERM *is* an excellent program requiring an external Hayes-compatible modem.)

Operation is simple; just insert the PIBTERM disk in the current drive and type PIBTERM at the prompt. Documentation is equally easy to get: just put the "DOC" disk in the current drive and type "PRINT PIBTERM.DOC."

Order your copy of PIBTERM today! Send $20 for the two disk set to:

Epson World PIBTERM
Box 369
New Boston, NH 03070

genealogy. Never had a hardware failure (since July 1983.)

Do I need MS-DOS? Nope! I'll settle for my "plain Jane" who may be a little dusty and green with envy now and then, but all in all still serves me quite well.

Jack de Coup-Crank
La Puente, CA

Point well taken in your case, Jack, and a lot of people are in the same position. You can certainly argue merits of one system over another, but the bottom line is usually finances vs. need. Of course if you just want a new system, no other justification is required.

The situation at EW is simply that none of the QX products can do the job we need without causing losses in productivity at best; none can do our typesetting. Presumably some of the Epson MS-DOS product line could fulfill our needs, but at a higher price than necessary to pay. (By the way, it's been over eight months, and we still haven't seen any review products from Epson.)

The computer isn't worn out if it still does the jobs you want it to, in the time you have to spend with it.

I agree that the market is clearly dominated by MS-DOS, and I also think there is life after Valdocs. Instead of pushing your MS-DOS Clone, why not promote a better board than the Titan for the QX. It can be done—the old Chameleon portable ran both CP/M and MS-DOS beautifully. Perhaps a new motherboard would do the trick.

S. M. Gayle
Carlsbad, CA

The purpose of EW is both to support those continuing to use the QX computers and ease the inevitable transition to MS-DOS for those ready for the move. There is no market potential for another "Titan" board. The selling price would have to be nearly as much as an entire MS-DOS computer system. Look at the Titan vs. EW Clone: Titan board $349 plus $200 memory. Then add $100 for MS-DOS and, for example, Ability software at $99 for a retail price of $749. The clone at $999.97 is much faster, has more memory, and a complete new system with no compatibility issues to contend with.

As a member of the Heuristic Users Group (HUG), I must, with all due respect, refute and/or otherwise discredit the finding of Professor Herkinspieler. We of HUG know by experience that we are not going bald; on the contrary, we are growing more face.

I find it curious that members of PIG didn't grow hair anywhere but on the top of their heads. Clearly the "After using EW photo" demonstrates otherwise. THAT finding agrees with our independent discovery made at the HUG laboratories.

It has also been demonstrated that the main cause of baldness is poor hemodynamics. This finding is corroborated by the fact that one need not take EW to bed to go to sleep. HUG members get plenty of sleep in front of their computers while reading all the news on the Valdocs front.

Despite the aforementioned flaws in the BIG, PIG and FIG research conducted by Prof. Herk, I've decided to renew. By the way, I'm bringing out a new bumper sticker: Have you hugged your Epson World today?

Dana Reedy
Address Unknown

Never let it be said that we don't allow views differing from our own to be voiced in EW. Prof. Herk nearly had a coronary when told we were publishing the above trash... er, independent viewpoint. We'll send Dana a Disk of the Month of his choice if he'll send us his address. Make our day, send in your stories.

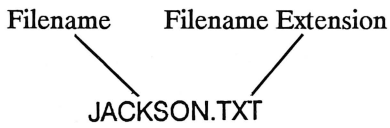
MS-DOS Filename Extensions & Reserved Filenames

Here's a listing of those mysterious files that come and go in the dark of the night. Copy these tables and keep them handy for reference!

By Dennis Dreyer

Players new to the MS-DOS arena often wonder how they can tell what some of the files that they find on various disks are for. Often you can get a good idea just by looking at the filename or the filename extension, those three characters following the filename.

Like CP/M, MS-DOS filenames are made of eight characters followed by a period and a three character extension. For example, the file:



has a filename of JACKSON with the extension TXT. In this case, we are probably looking at a text file having something to do with Jackson.

MS-DOS uses several standard filenames and filename extensions that are useful to know about. Table one lists the "special filenames" used in MS-DOS. These are generally made, used and (often) erased by the system while doing special tasks. Unless you become involved with "heavy duty" programming, or use CHKDSK a lot, you'll probably never encounter most of these filenames.

You should normally avoid using the filenames listed in Table 1 when naming your personal files unless there's a particular reason for doing so. These files can be automatically evoked during system operation and data in them erased or destroyed, without doubt causing you severe grief, a migraine or an MTS attack.

Common Filenames Used by MS-DOS

%PIPE This file is used for temporary data to be used in a "pipe" which is used to redirect output or input to another place. Example:

A>DIR ADRIVE.DIR

This stores a copy of the directory in a file called ADRIVE.DIR. The filename %PIPE is used to receive the directory information during the actual transfer process. Once completed, the file is renamed ADRIVE.DIR by DOS. (MS-DOS 2.0 and above.)

NUL This is a "bit bucket"; anything sent to this file goes to never-never land and can't be retrieved. The NUL file is normally used to receive unwanted data such as a compilation listings, diagnostic messages and other data not needed at the time.

BADTRACK The file that holds the addresses of bad clusters on a disk. Only used in MS-DOS Version 1.

@... Used by the linker in the auto response file. Example: @FILE.EXT

FILEnnnn.CHK Lost clusters recovered by CHKDSK. (MS-DOS 2.0 and above.)

FILEnnnn.REC Filenames from the "Whole" disk RECOVER process. (MS-DOS Version 2.0 and above)

VM.TMP Written by the Linker when out of memory for the load module.

Table 1 - Special filenames used by MS-DOS. Don't use these names for an important file with one of these names because data stored in it may be destroyed by normal system operation.

Table 2 lists many filename extensions established by DOS and the user public as "standards." Filename extensions have no particular technical significance, although some programs are set to recognize them by default to prevent strange things from happening. Keep in mind that these standards are generally used simply to make files more easily identifiable. The ones listed here are the majority of filename extensions that you'll encounter in your MS-DOS adventures, but there are many more not mentioned, which are mostly produced by special software or programs.

EPSON & COMREX PRODUCTS
NOW AT
AFFORDABLE PRICES!
(Too Low To Publish)
NEW AND DEMO UNITS

Partial List

Just Arrived—New QX-10
. . While They Last . .
QX-10 + Hasci Enhanced Software
QX-16 Most Epson Printers
HX-20 + Software + Accessories
PX-8 + Software + Accessories
Port. Wordstar/Calc./Sch.
Instant Access Guide
All Epson Books
Most Comrex Printers & Monitors

Titan QX-PC2/192 • 256 • 512K

AAA LIQUIDATORS
P.O. Box 5532
Buena Park, CA 90620
(714) 994-6472
Mon.-Fri. 9:00-5:00 Pacific Time

QX-10/16 HARD DRIVE
COMPLETE 20 MEG SYSTEM
$995.00
FULL ONE YEAR WARRANTY

COMFILER UPGRADE TO 20 MEG
$445.00

FULL SUPPORT OF CPM/TPM/MSDOS

Comfiler Cast Systems Upgraded
To Comfiler 1510 Compatible

PRO SYSTEMS, INC.
10711 W. 63RD
Shawnee, KS 66203
913-631-2190

MS-DOS Filename Extensions

.$$$ Temporary files used by text editors, word processors and other applications.
.ARC A archived file created by ARCHIVE Software.
.ASC A text file in ASCII format.
.ASM Assembler source file in ASCII format.
.BAS BASIC source files that can be in ASCII or Binary.
.BAK Backup file. Some editors, text processors will rename the original file with this extension before it writes the changed file.
.BAT BATCH files, such as AUTOEXEC.BAT. These files are us by DOS, if so directed, as commands being typed from the keyboard.
.BIN Binary image files.
.CNF Usually stands for software configuration files.
.COM Command files, can be run as a standalone program.
.CRF Cross reference source files, usually ASCII.
.DBF A database data file.
.DEV Stands for devices, such as SPOOL.DEV which can only be .DOC — A text file of an instruction manual or document.
.DQC Usually anything with a 'Q' in the middle of the extension means the file was squeezed by a Squeeze Utility. Use UNSQUEEZE to make it readable or usable.
.ERR Usually error messages used by software.
.EXE Executable file created by a linker, can be standalone or need another module to run.
.HEX A HEX ASCII file. DEBUG will convert it to binary when it is loaded.
.LIB Source code for library files.
.LST An assembler listing. This file is just ASCII text.
.MAC A macro file of key commands or strings.
.MAP Linker's Map File.
.OBJ An assembled or compiled object (or intermediate, non-runnable) file. For example, QuickBASIC compiles a BASIC source file into an object file and the linker then converts that file into an EXE or COM file which can be run.
.REF Cross reference listing file.
.REL Relocatable file from an assembler.
.SYS System files for DOS, like CONFIG.SYS.
.TMP Temporary files.
.TXT A text file, usually in ASCII format.
.ZOO An archived file created by ZOO Software.

Table 2 - Some MS-DOS filename extensions you'll run across. These are simply conventions used to help identify the nature or purpose of the file.

Cracking the Public Domain

Have you gotten hold of a public domain disk and not been able to do anything with it? Disappointing, yes? Despair not; here's how to unpack a Disk of the Month, and practically any other like it you're likely to find!

By Jim Hansen

Public domain software is the single major source of new software for CP/M computer users and has terrific bargains for the MS-DOS world. EW's Disk of the Month is one of the best (and cheapest) ways of accumulating new software. Unlike most public domain disks you see around, each of our Disk of the Month disks are packed (quite literally) to near capacity. This is good for those looking for the best value for the dollar, but it causes new buyers some problems as well.

In our CP/M Disk of the Month products, you'll find that many of the files are compressed ("squeezed") to minimize the disk space used. Others are combined into a "library," and still others are first compressed, then stored in a library file. You'll need a program called **NULU** (for New Library Utility) or **DELBR** (de-library) to extract the files from a library, and another program called "USQ" to un-squeeze them back into shape again.

MS-DOS disks are a little simpler to deal with because most data and program files are either usable "as is" or stored in an "ARC" file. An ARCed file is similar to CP/M's library file, and a special program (we call it "QARC") is needed to unpack these programs and make them available for use.

You'll also find text files on all of our disks. There are informational files describing the disk, as part of the disk offering itself, and (usually) buried inside one or more of the library or ARC files.

If you're new to the public domain, you'll need to learn something about these files and the "unpacking" process. The procedure is simple, once you've been through it. Once started, the operation is largely automatic.

Filenames You'll Encounter

Before getting into the details of how to unpack a disk, let's take a look at how CP/M, TPM and MS-DOS files are named. Filenames consist of up to eight characters, plus an optional period and extension name of up to three characters:

Filename.ext

A couple examples are:

PACMAN-1.COM
CRUNCHER.LBR
-README.ASC
MAYBE.ARC

As you can see, practically anything can be used for the filename itself, although some characters are not allowed. In CP/M, you can't use *question mark, asterisk, period, comma, equals sign,* or *colon;* MS-DOS filenames don't allow most of these either, and further disallow brackets, vertical bars. (Check your PC-DOS manual under File Specifications for details.)

By convention, file types are identified by the three character file extension. Most general CP/M usage honors the filename extension conventions shown in table 1. As you can see, there are several types of names used almost interchangeably for text files; DOC, TXT, ASC and others are generally used by whim. If a file you've discovered on a disk doesn't have either an extension or one of the ones listed here, it may be a text file; failing that it will probably be a data file of some sort.

Files you'll likely find on MS-DOS disks are listed in table two. Like CP/M, certain conventions are followed for program files, but text files can be called almost anything. Sometimes it is useful to establish your own conventions if you are moving a lot of data back and forth. For example, here at EW, we call plain text files "DOC" files, and those coming from WordPerfect "WP" files.

.ASM	Assembler source code.
.BAK	A backup file usually from a text processor.
.BAS	Source code from BASIC.
.DAT	ASCII text data.
.DOC	A document (ASCII) file.
.LST	A listing file, usually ASCII.
.SUB	A submit file.
.TXT	A text (ASCII) file.

Table 1: A partial listing of filenames commonly used in CP/M. On EW's Disk of the month, you'll also see a README.1ST and .DSK file. Both of these are text files as well.

File Extraction Tools

When unpacking a CP/M public domain disk, you'll need some special tools or utility programs. These programs are used to make separate files from library files, and unsqueeze files that have been compressed to save disk storage space.

Here are the files that I have on hand to use when unpacking a CP/M disk:

NULU.COM: This is a super-duper library utility that I don't like (seems over complicated to me), but have around anyway. It can make libraries, extract individual files and generally horse around with them. I've never used it except in emergencies; I prefer DELBR.COM.

DELBR.COM: Does nothing but unpack libraries, automatically, without any funny parameters to enter or get in your way.

CRCK.COM: A program that generates a check number on the contents of a file. It is a good way to compare files – if they have the CRC number, as reported by this program, chances are good they are the same. Quick and simple to use.

PIP.COM: I normally use the standard CP/M PIP.COM, although some true believers rename ZPIP.SYS from TPM-land to PIP.COM and use it instead. ZPIP is handy because it can do things PIP can't. (To see the commands usable in ZPIP, just type ";H" at the ZPIP prompt.) PIP (or ZPIP) is needed to conveniently copy single files, because, unfortunately, CP/M's COPYDISK is a nuisance and incapable. (ZPIP runs just fine in CP/M if you rename its extension to "COM". It is particularly good when used in SUBMIT files because its semicolon commands can be used there.)

USQ.COM: The "unsqueeze" utility. This program expands programs that have been squeezed by its sister program called SQ.COM (squeeze).

.ARC	An archived file. (Similar to CP/M's .LBR).
.BAK	A backup file from a text editor
.BAT	A batch file (Similar to CP/M's .SUB).
.COM	An external DOS command file.
.EXE	A DOS run file.

Table 2: Some common files found on MS-DOS public domain disks. These also have the same collection of extension names for text files.

SQ.COM: The "squeeze" program. I have this one around just to make sure I can squeeze something. Never have used it.

SD.COM: A sorted directory utility. Lists the files on a disk in alphabetical order along with their sizes, and lists the disk capacity used.

COPYDISK.COM: The standard CP/M B copydisk routine. I use this to format disks, and when I need a quick single copy.

You might like to make a special CP/M disk with these utilities (and any others that you like) and call it your "Unpacking" disk.

MS-DOS users have it much easier. About the only program needed here is called "QARC." It unpacks the ARC files found on EW's MS-DOS Disk of the Month public domain disks.

Unpacking a CP/M-Valdocs Disk of the Month

After you have located the programs listed in our "Unpacking" disk, you are all set to tackle a Disk of the Month. It really isn't too big a project and will only take about 15 minutes if you have everything ready before you begin. For this example, we'll extract the banner program called FONTSY, available on our December, 1986 Disk of the Month. The steps are easy.

Step 1. Before you do anything, use COPYDISK to make a working copy of the public domain disk you are going to unpack. There is no excuse to ever lose a disk when copies are so cheap. (Green Tree sells inexpensive disks for 39 cents each... buy a bunch if you're short.)

Step 2. Format a disk using COPYDISK; then using PIP, copy DELBR.COM, USQ.COM and FONTSY.LBR onto it. The reason for copying DELBR and USQ to the disk is simply for convenience; you'll see why in a moment.

Procedure: Initialize your computer using CP/M (2.25 or equivalent preferred), press the COPYDISK key, then select the FORMAT option. Place the blank disk to be formatted in the right drive and start the FORMAT operation.

Once the disk is formatted, exit COPYDISK and at the system A> prompt, type "PIP" and press return. You'll be rewarded with the standard PIP prompt, a single asterisk (*).

If DELBR.COM and USQ.COM are not on your CP/M disk presently in the A drive, replace the CP/M disk with one containing these files. (CP/M allows disk swapping at times like this without telling the system. It doesn't get confused like TPM.)

At the PIP prompt type the following commands:

```
*B:=A:DELBR.COM
*B:=A:USQ.COM
*
```

Step 3. Copy the file(s) you want to unpack from your public domain disk to the data disk. In this example, we'll unpack FONTSY.LBR, the banner program distributed on EW-7C, the December, 1986 disk of the month.

Place your working copy of EW-7C in the left (A) drive of your computer, and, continuing to use PIP, copy the FONTSY library file to the data disk with this command:

```
*B:=A:FONTSY.LBR
```

The file will be copied to the B drive, but will take a little time because of its length. When the PIP asterisk prompt is returned, exit PIP and return to the CP/M A prompt by pressing the RETURN key.

```
*

A>
```

At this point you might want to check the B disk by listing its directory using the DIR command or, even more interestingly, with the SD command. SD lists the programs in alphabetical order and also shows how large they are and how much disk space is left.

Replace the public domain disk in the A drive with your CP/M unpacking disk that has SD, then type the following command:

```
A>SD B:
```

The files are listed on the screen, showing that FONTSY.LBR is 102 Kbytes long. At this time 256 Kbytes remain available on the disk.

Step 4. Make your data disk the current CP/M disk. You can do this by moving the data disk to the A drive, or by typing this command:

```
A>B:
B>
```

We'll assume you typed the above command rather than physically switching the disk. It's easier!

Step 5. De-library FONTSY.LBR. It's all downhill from here. Enter this command:

```
B>DELBR FONTSY.LBR
```

The DELBR program will now automatically unpack (or extract) all the files hidden inside FONTSY.LBR, listing them on the screen as it goes. This is a disk intensive process and will take a little while. When all is done, you'll have a collection of files added to your disk, all of which have a "Q" as the middle character of the filename extension.

Generally speaking, in CP/M any file which has a "Q" as the middle character of the filename extension is a "squeezed file." This type of file has to be unsqueezed before it can be used, using the program USQ.COM which we copied to the data disk a few moments ago.

Although you can start unsqueezing these files right now, it might be easier to get a hardcopy listing of all of them so you can check each off as they are unsqueezed. Do this by making sure your printer is ready, then type a control "P" (hold the control key down while you type a "P"; either upper or lowercase can be used), then enter the following command:

```
B>A:SD
```

The listing generated by SD (see *Listing 1*) will be sent to both your screen and printer. Turn the printer off by typing another control P.

```
B>a:sd

CLARE    .FQT    6k : DELBR    .COM    8k : DINGBAT .FQT    2k : FONTCOL
FONTCODE.COM   26k : FONTSY   .BQS    8k : FONTSY   .CQM   22k : FONTSY
FONTSY   .LBR 102k : GOTHIC   .FQT    8k : HERON    .FQT    6k : KIWI
RAVEN    .FQT    4k : USQ      .COM   10k
    Drive B, user 0 contains 232K in 14 files with 144K free
```

Listing 1: Fontsy working disk before unsqueezing files.

Step 6. Using USQ.COM unsqueeze each of the files extracted from the FONTSY.LBR file. The order in which this is done is not important. You can unsqueeze them one at a time or "in a batch." One at a time:

```
B>USQ CLARE.FQT
CLARE.FQT -> CLARE.FNT
B>
```

In the example about USQ unsqueezed CLARE.FQT and made a new file called CLARE.FNT. You can save a little time and type several files to be unsqueezed at a time:

```
B>USQ CLARE.FQT
FONTCODE.CQM RAVEN.FQT
```

Separate each filename by a space. There is a practical limit as to how many files can be listed this way, but doing them four or five at a time is okay.

After all the squeezed files are processed, do another SD and compare the sizes of the squeezed and unsqueezed files:

```
B>A:SD
```

In this particular case you can see that squeezing didn't particularly save much space on the FNT files (these are the fonts for the banner program), and generally picked up only 2 Kbytes on most. (See *Listing 2.*) But notice that the FONTSY.DOC file is now 18 Kbytes long, whereas the FONTSY.DQC, the squeezed version, is only 12 Kbytes. And no doubt you'll see that our disk is now nearly full, with only 16 Kbytes remaining!

Step 7. Clean out all the "garbage" files. This is your last step before declaring extraction complete. You no longer need the FONTSY.LBR or squeezed files on the working disk, so erase them using CP/M's ERA command:

```
B>ERA FONTSY.LBR
B>ERA *.?Q?
B>ERA DELBR.COM
B>ERA USQ.COM
```

Now do one last SD, and you'll see a clean disk with 248 Kbytes free and

```
B>usq fondtcode.bqs fontsy.dqc kiwi.fqt

FONTCODE.BQS -> FONTCODE.BAS:
FONTSY.DQC -> FONTSY.DOC:
KIWI.FQT -> KIWI.FNT:
B>
B>a:sd

CLARE   .FNT   8k : CLARE   .FQT   6k : DELBR   .COM   8k : DINGBAT
DINGBAT .FQT   2k : FONTCODE.BAS  16k : FONTCODE.BQS  12k : FONTCOD
FONTCODE.CQM  26k : FONTSY  .BAS  10k : FONTSY  .BQS   8k : FONTSY
FONTSY  .CQM  22k : FONTSY  .DOC  18k : FONTSY  .DQC  12k : FONTSY
GOTHIC  .FNT   8k : GOTHIC  .FQT   8k : HERON   .FNT   6k : HERON
KIWI    .FNT   6k : KIWI    .FQT   6k : RAVEN   .FNT   4k : RAVEN
USQ     .COM  10k
    Drive B, user 0 contains 360K in 25 files with 16K free
```

Listing 2: Fontsy working disk after unsqueezing files. It is nearly full.

FONTSY ready to run. Before running FONTSY, print out the documentation. Ready your printer, then type a control P, and the following command:

B>TYPE FONTSY.DOC

After the 18 Kbyte documentation file is printed, type another control P to turn off the printer, and you're ready to install and run FONTSY:

B>FONTSY

The first time you run FONTSY it will report a missing file named CLS.DAT. This file is used to hold the clear screen information and you will be prompted to supply it. This information can be found in the back of your CP/M B manual in Appendix F, "TVI-920 Control and Escape Sequences."

Lest this frightening title scare you off, this is just a collection of control codes that cause something to happen to the screen display. The clear screen code is listed about half way down the page; it is a hexadecimal "1A," which converts to decimal 26, the value you'll supply when prompted.

Start FONTSY by typing this command:

B>FONTSY

Shortly a message, described in the FONTSY documentation, is displayed and you're asked for the clear screen code. Type the number "26" and press return. It repeats the question for the second clear screen code. The QX computers use a single code, so just press return to skip this entry. The "missing file" is written to the disk, and you'll never be asked about it or the code again.

At this point FONTSY is up and running and you're all set to use the program. Be sure to make a spare copy of this disk just in case either you or your computer does something unforgivable. Refer to the .DOC file for information on using FONTSY. You'll find it is simple to use and does a great job making large banners.

The preceding example showed the typical steps for unpacking CP/M programs, and by now you've done just about everything there is to do when unpacking them. Here are some questions and answers about the process:

Q: What should I do if I find a file such as GREATFIND.LQR?

A: The Q in the middle character position indicates it is a squeezed file. So before this file can be used with DELBR, you'll need to run USQ on it. Remember how? Assuming that both USQ and GREATFIND.LQR are on the current disk, just type USQ GREATFIND.LQR; the rest is automatic. After that, erase GREATFIND.LQR, the squeezed version from your working disk, then type DELBR GREATFIND.LQR to unpack it. Simple, yes?

Q: What are "README" files?

A: These are text files placed on a disk to tell you something important about the disk or the programs thereon. You'll find many variations. Some quick examples: READ.ME; README.DOC; README.1ST. To print them from CP/M, at the A prompt, ready your printer and type a control P (to send output to your printer) then type:

TYPE READ.ME
(or whatever text file you wish)

On MS-DOS systems you can do it two ways, starting at the system prompt:

TYPE READ.ME
or
PRINT READ.ME

In MS-DOS, anything TYPEd goes to the screen, and anything PRINTed goes to the printer.

Q: What if I don't have any of the unpacking programs?

A: You are up that infamous body of water without means of self-locomotion. You can almost always find them (or some variation of them) on bulletin board systems if you are a telecommunicatorist. Often friends will have them, and usually you'll find them on our Disk of the Month. If you are really up the creek, order our PD-Unpack disk. It has the complete collection as described here. MS-DOS users will usually find QARC, their unpacking utility, on most EW Disk of the Month issues.

Unpacking MS-DOS Disks

This one is short and easy, simpler than with CP/M because you won't usually have to worry about unsqueezing the individual files. MS-DOS disks usually have only text files (use PRINT or TYPE to read them), program files (those with either .COM or .EXE filename extensions), and "ARC" files. The ARC files are generally the equivalent of CP/M's LBR files.

The only software you need, then, is that required to un-ARC the ARC files. This program, QARC, is the one normally distributed with every Disk of the Month.

Use QARC just like DELBR described above. Copy QARC and the ARC file you're after to a formatted disk or a new, empty directory on your hard disk, then make that disk or directory your "current" one.

Start the conversion and extraction process by entering this command, shown from the B disk prompt:

B:\>QARC NEWSTUFF.ARC

The extraction process is automatic and no options are needed. After QARC has run, you'll end up with all the files related to the original ARC file on your WORKING disk. At this point you can delete (use the DEL command) to erase the ARC file from your working disk.) Although QARC works without a hitch, some have encountered confusion because the instructions from within QARC tell you to use PKXARC as the program name rather than QARC. (Instructions will be printed on your screen if you type "QARC" followed by a return.)

The instructions are valid provided you substitute QARC for the program name or rename QARC to match the instructions. Why QARC is called such and not what the original author named it is a mystery, but the p-domain has standardized it to QARC, so that's the way it is. (If you are a Heavy Duty Hacker or just want to play the options offered by QARC may be useful to you; otherwise they won't do much for you.)

CP/M Unpacking Disk Available

This disk contains all the useful programs you need to process most libraryed, squeezed and crunched (another way to squeeze) files into usable form. Although these files are available throughout the public domain, and most have appeared at one time or another on our Disk of the Month offerings, never before in the history of mankind have they been so carefully collected and made available. Here's what you'll get:

COMPARE.COM: Compares two files so you can see if they're the same.

CRCK.COM: Generate a check number for a file. Often in the public domain you'll find two files of the same name. The check number from each will tell you if they are the same. (This is much quicker than actually comparing the two files.)

DELBR.COM: A program to simply de-library all the files in a library. It is easier to use than NULU.COM, but doesn't allow you to examine the contents of libraries, extract individual files, etc.

NULU.COM: A powerful library utility.

DR.COM: A directory program similar to SD.COM, but files are alphabetized by vertical columns rather than horizontal rows.

SD.COM: The sorted directory program most commonly found in the public domain.

SQ.COM: A program for squeezing files.

USQ.COM: A program for unsqueezing files.

CRUNCH22.LBR: A library containing a cruncher, uncruncher and documentation for same. Crunch is a newer system that is more efficient than squeezing, but not terribly common yet.

To make your unpacking disk complete, simply add **CP/M B2.25** (or newer), **PIP** and **COPYDISK** (both from your CP/M disk) and you have a complete unpacking library. (The missing files are copyrighted programs so we can't send them to you directly. Sorry.)

Order Today! Send $15.00 for the **Public Domain Unpacking Disk**, c/o Disk of the Month, Epson World, Box 369, New Boston, NH 03070.

Tech Tip

If you have bought Greg Stevenson's utility THE QX CURE-ALL© through the IPG, and if you have a QX-16™ and use quad formatted disks for Valdocs+, III—you have sufficient space on your Editor disk to include the documentation, QXCURE.VAL, and the actual program, QXCURE.SYS, on your application disk.

The instructions are on page 5—follow them and use any of the top row keys. Since I never use the SCHED.CHN utility, I moved it to the utility disk, copied QXCURE.SYS (through COPYDISK NON-INDEXED FILE to the Editor disk and renamed it SCHED.CHN. I rebooted the system and *Voila!* pressing the <SCHED> key got me into QX CURE-ALL to do disk statistics on my articles and other writings. The <STOP> key gets you to TPM where a "RESTART EDIT" will get you back to the editor.

When you make up a special disk, remember to use the file Q16V375F on your utility disk in order to put TPM on the system tracks, otherwise your new application disk will not be bootable.

The files on this disk are as in the table below. (Printed out by CTRL <PRINT> using LD at the TPM AO> prompt.)

Erika Kuelke
Kinnelon, NJ

Want to be Famous?

It's really easy. Just sit down to your friendly tube and write a short essay (300 words or less) titled "What My Computer Has Done to Me" or "What I've Done (or said) to My Computer" and send it in to us by June 1. We'll give a free one year subscription to the top five winners, whose compositions will be printed in one of our summer issues!

From the Publisher

As you've probably already noted, this issue is called March-April. It is also exactly the same size as always, and is our way of restoring our publishing cycle, so you should henceforth get your EW during the month posted on the cover—provided we and you get some modicum of cooperation from the post office. You should also note that your subscription has been adjusted to accommodate our phantom March issue.

Speaking of our beloved post office, it seems to us that our postal system has developed some sort of cosmic awareness, apart from anything we would expect. Most private individuals never get a chance to experience this awareness, but given the volume of mail that we at EW produce, let me tell you...

We have experienced the dark side of the post office in maybe a dozen cases. Here's what happens. An otherwise normal address (as printed on your address label) suddenly turns to mush and becomes "undeliverable"; sometimes it is returned to us, but mostly the victim at the receiving end just never gets our mail, be it magazines, Disk of the Month orders or other products.

Currently we are fighting the post office, desperately trying to get a magazine through to the Virgin Islands without having to send the darn thing registered mail. For the last four months, this patient customer has written us each month and we've responded by sending a second copy of EW first class. The first class gets there, but the regular bulk mailing, well, must be going to Cuba for all we know.

Another recent example: a fellow associated with the Miami Area Users Group (if I have the name right) ordered a Disk of the Month for the club back in October-November; it was mailed first class, as are all DOM orders. About two months later we got a letter wondering where his order was. We sent a second copy, and a couple days later the first one came back; a stamp had been ripped off in transit, and some conscientious postal clerk returned it to us. The story doesn't end here. Apparently the second disk never made it either, so we sent a third. Haven't heard anything for a while, and I wonder if he got it or has given up.

The same phenomenon exists randomly throughout our mail list without rhyme or reason. Sometimes neighbors or friends get their issues while someone next door sits waiting for a magazine that never shows up. Makes them unhappy, costs them a phone call or letter, and costs us the profit margin from that subscription to mail it out a second time. I haven't too many good things to say about the post office, especially when subscribers living 21 miles from here get their magazines 28 days after we've mailed them. At any given time we will have four or five people suffering from this malady. The problem usually clears itself spontaneously.

We were a tad late getting the February issue out, and I'll take the fall for this one. Towards the end of January I sprung my back while picking up a pair of gloves off the snow blower. (It snowed in New Hampshire this year.) The net result was about zero productivity while I was either flat on my back or attending physical therapy. And of course, February was a short month and the magazine was late getting to the printers by four days. Then the camera at the printer broke, taking close to a week to fix. The February issue hit the post office in Manchester on March 4. We normally get the magazine in the mail during the last week of the month. Sorry for the delay; it was the best we could do under the circumstances.

Lady Chicken is still living with us and yes, we are still searching for ways to get her back in the coop, without success. If you have a suggestion, practical or not, be sure to drop us a note; I'll give a one year subscription or extension to the best, a copy of the QX-10 User's Guide (my favorite book, heh, heh) and a Disk of the Month to the two runner-ups. Winners to be announced next month.

You may have heard about kids or people with pet chickens. It actually happens. To recount, Lady Chicken got her foot stuck in the chicken house door, and her friends attacked, taking most of the feathers off her head. We moved her into the kitchen to recover; my two girls created a diaper for her so she could roam; I want her back out where she belongs, but she's attacked on sight by any chicken near her.

This cluck has taken over the house, and loves petting. (She makes cute clucking-purring noises, closes her eyes and gets all puffy.) Fortunately she is absolutely odorless if her

newspapers are changed every day. Having a chicken in the house is sort of like having a mobile garbage disposal. Got a crumb or something to get rid of? Toss it over your shoulder. It'll never touch the ground. Don't need a carpet sweeper either. This chicken (with diaper) spends her time picking up nits.

Of course Becky Bulldog is intensely jealous, and when handouts are available, she'll do almost anything to get them before Lady. One day I found that the chicken likes peanut shells. Turns out the bulldog does too, although there was great disappointment in her eyes as it went down. I'm probably the only one in the house who still wants the chicken out. Please, people, help me!

We've had a very good response to our EW Clone offer. Except for Epson, who still hasn't supplied any review products (for over eight months now), we've had no negative comments about the promotion and received quite a few questions about the system.

The most commonly asked question is about the disk drive configuration. When you buy one of our systems, the *minimum* configuration is with two floppies. Our standard system is supplied with normal 360 Kbyte drives. I don't recommend high density drives because they need more expensive disks, which, once formatted in high density, aren't usable with the majority of systems available today. And besides, with a hard disk, there isn't a need for high density floppy storage. So far we've only sold six systems without the hard drive.

Our clone has room for up to four half-height *internal* disk drives. You can add an optional hard disk and another floppy or second hard disk any time you like. It just takes five screws to remove the top, and four to mount a drive. Plug in the cables to it, install the controller card and you've added the hard disk. The hard disk lives inside the case, under the floppies so you can see its red light; there aren't any extra wires or boxes hanging outside the system.

Ability, the software bundled with our clone, is available from your local dealer for $99 or us at $70 plus $4 postage and handling. Apparently Migent has picked up a goodly number of direct inquiries from you folks about it. The software is reliable, priced about right and will get you going in the MS-DOS world with a minimum investment. Works fine on the QX-16 except for telecommunications (use PIBTERM for that), but not at all on the QX-10/Titan.

Remember all that loud stuff I put out last month about the telephone service? The joy ride is over. On average it now takes me about an hour with the autodialer hitting it once a minute to get a line. I've *NOT* sent in new orders received since the middle of February (I have quite a stack waiting) because the system is overloaded to the point of not being usable. If the phone company being hawked to you is called IDEAL Z-TEL, just smile and turn them down. It's a waste of your money at this point.

IDEAL and other similar phone services provide an 800 number and access code. The idea is that you dial the 800 number, the access code and then the area code and number you want to talk to for some flat rate. IDEAL charges $120 a month and hands out up to $25 in "commissions" to the people selling the service, namely anyone who signed up.

Can such a system be financially sound? As a matter of interest, I called AT & T and asked about WATS lines and attendant rates. (This is the service supposedly used by IDEAL.) The rates quoted me for 100 or more hours of use per month for both and incoming and outgoing Band 5 WATS (the nation-wide variety) are about $27 an hour. (When you make a call on IDEAL, you dial in on an incoming WATS, then out on another.)

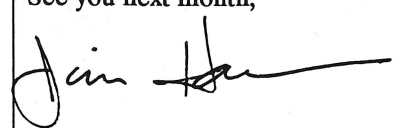
So let's say you have a 30-day month, and your lines are fully utilized for 720 hours of use; multiply that by $27, the hourly cost of the WATS lines, and you'll have a $19,440 phone bill each month. (The actual figure is a little higher because the first 99 hours of service cost more.) Now, subtracting the commissions, you find IDEAL gets $95 a month from each customer to pay for the $19,440 phone bill. How many customers does it take to break even under these conditions? Answer: about 205.

This number is close to what IDEAL said they were doing; they are putting roughly 280 people per line, leaving enough income for equipment, support and profit. It is unlikely that the service would ever realize 100% utilization, and during the day when loading is fairly high, people that would like to use the system can't, thus don't end up using their "quota" of time. If a line were available 720 hours a month and there were 205 using it, each person should be apportioned 3.5 hours (That's 720 divided by 205.) It would appear, then, that you are actually paying $120 for 3.5 hours of phone time or $34 an hour.

Humph! I had really acceptable service from November through the end of February, just about the time the last issue went out. Quite frankly, I can no longer recommend the service, and am amazed that it deteriorated so quickly. I'm terminating my subscription to it. If you're a subscriber, I suggest you do the same. The service, in my opinion, won't get any better.

And a footnote on MINC, the other phone service mentioned last month: they sent out a flyer offering to refund subscription fees since they haven't provided any phone service at all as far as I can determine. I asked for mine back.

See you next month,



Jim Hansen, Publisher

Write, Edit, Publish!

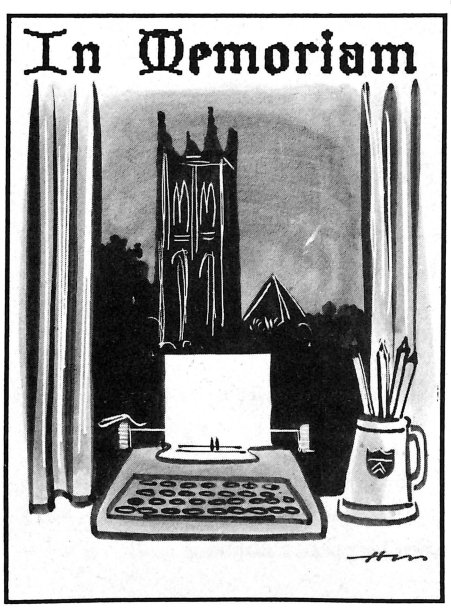
A guide to desktop publishing in the 1980's

Edited By John Whiting

By John Whiting

The other day one of my neighbors wanted to borrow my old portable typewriter. In a burst of generosity I gave it to her, knowing full well I might have sold it at a garage sale for as much as $5.

It was a sad day, nevertheless, remembering all the effort I had expended on that machine. Like most newspapermen, I always Xed out any words or sentences, never using an eraser. When I wanted to re-arrange paragraphs I had to cut them apart and paste them down in a new position. (And this was in the days before photocopiers.) In truth, the only thing I miss about the old Remington Rand Model 1 is the exercise. Oh, well...



But it did call my attention to the new techniques of writing, which are really at least as amazing as the time, almost a century ago, when Mark Twain was so delighted to switch from a pen (dipped in an ink well every six words) to a typewriter.

It took me more than a year to really catch on to the power that is now at our fingertips. I can write an anecdote or a quotation as the beginning of an article, and an hour later decide to use it instead as the snapper on the whip at the end. B for Bingo? No, B for Block.

Pouring out a stream of consciousness as fast as my fingers can hunt and peck is now a sensible way to write. No more deciphering scribbles.

Outlining, inserting subheads, or saving whole paragraphs for some "maybe" use next week are all as easy as tuning a radio (actually easier than running the VCR on my television set) or making breakfast in the Toastmaster.

COUNT YOUR BLESSINGS

I realize my readers know all this. But it is well to think of these obvious things now and then, and to examine one's writing habits, to make sure one is getting full advantage out of one's word processing capabilities.

Here is an example of the versatility of a word processor: recently I had to produce a glossary for a book. I had about 700 words to define, taking up a total of 80 manuscript pages, as it turned out.

For openers I had to make my word list, and alphabetize it. The first time, two years ago, that I had to do something of this sort, I used the Valdocs Address Book, and entered each word as a "Last Name," and then printed them out as though they were one-word labels. Okay, but a little cumbersome. This time I used a program called QX CURE-All, from the Independent Programmer's Guild[1]. In a couple of minutes I had an alphabetized word list.

Setting up a hanging indentation format, with the word or phrase in bold face, and the definition in normal type, was easy. I used two tabs, so that all my definitions would line up. A few weeks after I turned in the manuscript, my editor wanted some revisions. Voila! Two hours at the keyboard took care of that, and then another forty minutes making sure all my pages came out okay (I don't like two-word widows dangling at the top of a page), and the job was ready to print.

In the old days I would have had two choices: retype most of the 80 pages (by hunt and peck—though fast, I would have made mistakes and corrected them with a pen), or take it to a professional typist. Money, two days... and still a lot of proofreading to make sure no definition or line was dropped.

SUBHEAD GOES HERE

I have found that when I outline an article or a chapter, a good way is to do it using subheads, which will still be in the manuscript, of course, when it is finished.

To be sure, the subheads get rewritten, moved around, and in some cases dropped. But they are a good form of outline.

Among the other devices in writing that I find useful:

< > Ornaments, like this, to start each item in a special list, such as in a how-to article.

< > < > Double ornaments, instead of putting numbers in.

< > < > < > Triple ornaments, to make the point here.

< > < > < > < > Special formats. The word processor I know best, Valdocs+ III, has a rather good default format, with moderate margins. But if my copy is going to be worked over by conscientious nit-picking editors, like Jim Hansen, I sometimes give them wider margins, so they can ask their questions ("make queries," in the lingo of copyediting and proofreading).

IN MEMORIAM

The little drawing that illustrates the anecdote about the old portable typewriter was made by my friend Henry Martin, who has had hundreds of his lovely pen and ink (and scratchboard) drawings in the New Yorker and other magazines. It was given to me, by the author, as a gift, and Henry knows I will write about it. So it is quite legal to publish it.

But there are a lot of things to do with copyrights that require care—permissions, fees, and special notices.

If you are using one kind of computer that Hansen almost never mentions by name, you can now buy a machine that will digitize a photograph, such as something that appears in a magazine or a newspaper. You can then put it in the newsletter you are editing, printing it out with a dot matrix, ink-jet or laser printer.

But if you do, you are almost certainly violating a copyright. As an author, you wouldn't want to do that, would you? As a person of substance, you wouldn't want to be sued for a large sum of money, would you? As a law-abiding person, you wouldn't want to have to hire a lawyer to defend you in a court of law. Even without a scanning digitizer, there are ways to take care to stay out of court.

Don't steal writing from other people. Don't clip out cartoons or drawings from other publications, and paste them into the company newsletter that you edit. (When your company gets sued, the job that is lost could be your own.) There is a more subtle way, and it almost always works.

Write, get written permission, and give full credit to the original publication. Be sure to include the required wording, which will be something like this: Copyright © by Signal Publishing Company.

There is another way, and I wouldn't mention it any more than I would mention sex in Epson World—if it weren't so common. This way is best exemplified by this wisdom: "If you rewrite a lot of other people's original work, that's research. If you steal from only one source, that's plagiarism." Those two sentences are usually given in reverse order, and in fewer words.

SPEAKING OF NEWSLETTERS

As far as I know, the next thought expressed here is completely original and has never before seen the light of print: Because of the computer and what is called desktop publishing, all kinds of people-to-people communications are getting better and better.

< > The doctor on Block Island puts out a health newsletter. It has sensible things to say, and it surely does two things for the doctor: it saves repeating the same advice over and over, and it gives him a chance for self-expression. It's just plain Apple and dot matrix.

< > At the University of Miami, the Artificial Intelligence Reporter, edited by Chris Dudley, is the most sophisticated publication of all the ones I have seen. One does note, that it is still written by people, not by the machine. Oh, Univac, how you have progressed!

< > The publication style is plain, but think of the distances: the Government of West Australia published a newsletter, from their London office, about the races for the America's Cup... my friend Phil Wright started a small magazine, called Yachtline, which is full of ads for used boats in Texas... two gentlemen named Hild and Croft are putting out a tabloid-size publication to describe the videocasettes they sell. In two colors, at that... hospitals, local historical societies, village governments, the school superintendent in our town, three real estate companies... I think my folder of examples should be labeled "Freedom of the Press." As you may have heard, the Soviet Government is afraid to let the ordinary people have computers.

ALL FOR WRITERS

If professional writers, engineers, would-be poets, and doctors are all taking to writing, it is not surprising that someone has finally come up with a word processor just for authors.

It is called *WEBSTER'S NEW WORLD WRITER,* and is put out by the Computer Software Division of Simon and Schuster, Inc. The programming work was done by Tracey M. Siesser, James E. Korenthal, and Joel Moskowitz.

It's good work, too. There is an On-Line Thesaurus and Spelling Checker, and they're excellent.

There are several very good angles about *WEBSTER'S*:

< > It is easy to learn and use, compared to *WORDSTAR, PEACHTEXT, WORD PERFECT,* and half a dozen others I have tried. Yet it does about everything an author needs.

< >< > Its specific approach is to put a big upper status line, a sort of horizontal window, at the top of the screen. Then, with the cursor, you select various functions. This is one user who prefers the handiness to the MacIntosh, but there is a certain similarity.

< >< >< > The manual, which the publisher calls a user's guide, is as good as any I have seen and aimed at the writer, not the secretary or accountant, or hacker. There are sections on the rough draft, marking passages for revision, proofreading, and the final manuscript (to name a third of the parts on a Book-Length Manuscript). There are sections on scripts and on poetry, on speeches, press releases, and more. There are chapters on punctuation, wordiness, trite expressions, and words likely to be misused or confused.

If someone I can think of in the other world of computers had only had this manual a couple of years ago, we might not have had all that business of "documentation," which of course means "read this, get an engineer to explain it and show you how, and then memorize your own procedures in English, if you can." "The Webster User's Guide" was prepared with the help of Janice Maiman and Lorie Rothstein.

What you don't have: you can't do keyboard macros, at least not without adding a separate macro program; you don't have italics and subscript/superscript; and there is only one function key employed, F1 for Help.

WEBSTER'S NEW WORLD WRITER was made for the IBM, but it runs on my Titan Board in a QX-10. To pick up the newest acronym, the MSRP[2] is $150.

RESULTS OF MY OWN SURVEY

Out of thirty persons I checked, only six were really getting even half the available power out of their computers. Some had "not tried that yet," some "didn't know it was possible," and most did not realize the values hidden in their manuals, user's guides, or "documentation." Today's sermon: after a year of owning a computer, get out the manuals and check over your procedures, step by step. You will surely find things you "meant to learn about later" or things you didn't understand when you were beginning. It's almost as good as joining a User's Group.

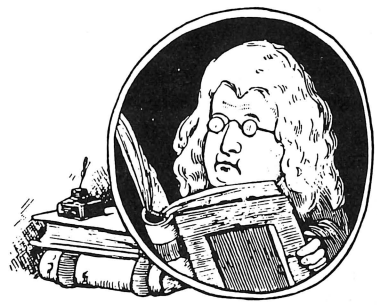
Observation: the Computer for Everyman is about as far along as amateur photography was a century ago, and in those days the Camera Club was important.

Pithy comment of the day, repeated so often it is out of copyright, and anyway Winston Churchill won't sue: "Short words are best, and the old short words are best of all."

---

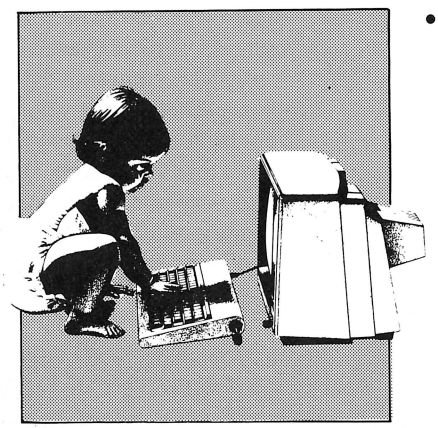
1. The **QX CURE-ALL**, Independent Programmer's Guild, Box 34, Route 1, Taos, NM 87571. *(Ed. note: See their ad in this issue.)*

2. Manufacturer's Suggested Retail Price. There are five pages about footnotes in the guide, but the footnoting is not automatic. So put them in manually, if you have to use them. I only do it to stagger Jim Hansen. *(Ed. note: Who hates these little buggers.)*



NO EXPERIENCE REQUIRED

SOFTWARE FOR YOUR HOME



- HOME MONEY MANAGER II (HMMII) is dedicated to managing your personal finances and reducing the amount of time you spend preparing tax forms. It can record all of your financial transactions including checking, credit cards, cash and ATC. Plus HMM-II quickly reconciles your accounts, prints nearly any size and format check and provides a wide variety of printed reports. Epson World Magazine called HMM "unusually complete, simple to use, the best I've seen." $89.95
- HOME INSURANCE is a home inventory system designed to make it easy for you to keep track of what you own, where it is located and the cost to replace it. Also includes a life insurance calculator and insurance records system. $34.95
- HOME LOAN — Learn the real cost of a loan. Compare interest rates and terms. Also includes amortization, retirement planning and college costs planning. $34.95
- HMM PERSONAL ASSET MGR. — Combines all of the above. $129.95

Homecraft • P.O. Box 974 • Tualatin, OR 97062 • (503) 692-3732
Please add $2.95 S&H per order. VISA, MC or check accepted.

PUBLISHER FACES JAIL!

By John S. Craparo

New Boston: Jim Hansen, publisher of the wildly successful Epson World Magazine, was arrested early today at his home in this sleepy New England village.

A press conference scheduled for 11 AM on April 1 by the town's Chief of Police should shed some light on the arrest. Sources close to PJ Industries, Hansen's firm, have disclosed the reason for the arrest.

In January, 1987 Hansen announced that his magazine would take on a new editorial direction during the coming months. His plans were to migrate the content of his publication from the acclaimed but controversial TPM operating environment to the more popular Sinclair-Timex environment. Simultaneously, he announced his involvement in a new computer marketing venture, and immediately began marketing an enhanced Sinclair clone which included an improved HASCI keyboard. The computer's quality, linked with Hansen's modest price, made the venture an overnight success. The personal computer industry hailed the options bundled into the system, from its multiple communication ports to its integrated software package.

Soon after Hansen's firm completed construction on its new corporate headquarters, the 64-story PJ Industries Tower in downtown New Boston, "all hell broke loose," according to our source.

The popular Sinclair clone soon developed a major bug. A disgruntled programmer who developed the Read Only Memory BIOS for Hansen had built a verbal time bomb into the system, causing the machines to spew out obscene messages at random times.

Months after the clone was on the market children throughout the country sat down at their dinner tables with new vocabularies. Parents with well-balanced check books quickly realized the source of their youngsters' new linguistic prowess (Hansen's clone) and the heat was on.

Letters and phone calls began pouring into New Boston. Writers waited vainly by their mailboxes for replies, and callers steamed at the incessant din of busy signals from telephones left off the hook.

Hansen nearly went mad trying to correct the problem. He worked day and night for weeks. Finally, sure it was fixed at last, he attempted to execute a program and the computer returned his command with, "Get your *#@& ^! hands off my keyboard".

With that, Hansen shrieked, lifted the computer from its mahogany pedestal, and heaved it through the window of his penthouse office. The next morning he was arrested.

It is expected that the District Attorney's office will hand down an indictment sometime in the afternoon of April 1. Retired Judge Joseph Whopper was reached and asked to comment on what charges he thought might be returned. "Defenestration," the judge replied, "And making an obscene clone fall."

Tech Tip

I read messages exchanged about problems faced with the Toshiba P321 and Epson LQ-800 printers, that make me appreciate my P1013 Printronix Personal Line Printer. Just plug it in! As if it was made for the QX-16! It prints at 134 LPM in draft mode and 47 LPM in letter quality, at a full 80 characters per line. This printer was as good as another QX-16 for me. It emulates the IBM Proprinter and LQ-1500. You can also add a font cartridge. I haven' come across any other desktop line printer with so many features and superior quality, due to its character matrix (larger than that of 24 pins).

D. M. Jogalekar
New York, NY

Your Source for EPSON® Computers & Printers.

- Full Service
- Trade Ins
- Consignment Sales Arranged

Computer Connection, Inc.
12 High St., Hampton, NH 03842
603/926-2551

The Official EW Disk of the Month Catalog

You've asked for it; the entire collection of our famous "Disk of the Month" series through the end of 1986 is listed here. Naturally we have all available and you can order them anytime.

EC #1
Modem Programs for the QX10: Contains MDM7, QXMDM, MDM712A and a collection of related utility programs.

EC #2
Utility Programs: Twenty-two files (including several libraries) of utility programs for word processing and library applications. Files include ABSTRACT, SYSNONYM3, VFILER, WCOUNT, COMPARE and much more.

EC #3
MBASIC Games & Financial Programs: Nine large library files of games and financial programs; about 272 Kbytes of software on this disk.

EC #4
MORE MBASIC Games: A fabulous collection of games, all written in MBASIC for easy modification and study. A total of 41 games (give or take a couple) suitable for recreational use.

EC #5
ADV.COM: Original, classic ADVENTURE game; still one of the best! Other classic games on this disk include ALIENS, ELIZA, MASTER MIND, OTHELLO, VEGAS, and CHESS.

EC #6
GRAPH. LBR: Contains a loader and 30 graphic pictures. Additional programs are BATTLESHIP, CALENDAR, CLOCK, ENVELOPE, KINGMAKER, MASTERMIND, MEGATREK, MUSIC PATTERNS, ROBOT, SHUTTLE, and more.

EC #7
VALMERGE.LBR: enables you to perform "Mailmerge" functions with Valdocs files. MUSIC.LBR: plays music on your QX-10. LEDIT.LBR: a simple line editor. FILMOD2.LBR: strips control and sequence characters out of WP files; transforms ASCII files to Valdocs format. CPMPOWER.LBR: excellent utility that incorporates many CP/M commands. @SYS: TPM equivalent of CP/M SUBMIT. NULU.COM: library utility. NULU.DOC: Documentation for NULU.COM. DE-LBR.COM: extracts files from .LBR files.

EC #8
Simple BOOKKEEPING, ACCOUNTS RECEIVABLE, INVENTORY, PAYROLL, CHECKBOOK, and various financial programs; small spreadsheet program; semi-integrated.

EC #9
Mini and full-fledged BBSs. All necessary software; requires Hayes or Hayes-compatible modem. Other files include; DE-LBR.COM, READ.ME, FONENAME.BAS, BABYCASS.BAS, WEEKDAY.BAS, BURNOFF.BAS (calculates hours of exercise required to lose X number of pounds).

EC #10
ZCPR1 replaces part of CP/M B2.25 for more functions and flexibility. Documentation, installation procedures included.

EC #11
Picture files, such as MOON (huge—to 6 ft. sq.), MONA LISA, STARSHIP ENTERPRISE, SNOOPY, many others. Documentation, utilities included; Epson RX, MX, FX printers.

EC #12
Best public domain CP/M communication programs; MDM798, QXMDM, MEX. A smorgasbord that covers everything you need for the QX-10. Compatibility with MDM7 overlays; PHONE, KEY, LOAD, SAVE, READ, SENDOUT, CALL, STAT, HELP, CLONE commands; support for all CCP commands. Run your office QX-10 from your home QX-10... operate a BBS... programs compatible with almost any BBS software.

EC #13
Helpful utility programs for CP/M, MBASIC programmers; with a few minor changes, they will work in MS-DOS GWBASIC. MBEAUT.BAS beautifies MBASIC programs; indents FOR/NEXT loops, IF statements, subroutines, etc. MBXREF.BAS creates cross-reference lists. MBREM.BAS removes all remark statements. BMLP is a macrolanguage preprocessor. BSLP translates structured statements into BASIC programs

EC #14
Public domain educational programs and games. 8080 assembly language tutorial; quizzes in literature, sports, tennis; Chess; Adventure games; Trivia; and more.

EC #15
CP/M utilities, including printer. USER, PIP, SUBMIT, and DIR replacement programs. Disk utilities allow you to copy, rename, delete from one program; examine and alter disk; change disk sectors, files, and memory; write your DIR to files; filename searches; and much more. Also includes security programs: sophisticated password placement, data scrambler. Versatile menu system creates "turnkey" systems. BANNER.ASM prints banner headers.

EC #16
Four data management programs: KREEP, menu-driven, memory-based DBM contains up to 100 records/file; CREATOR, creates DBM programs in MBASIC to your specifications; DIMS, somewhat similar to dBase-II; SEEKEASY, demo program shows power of commercial version.

EC #17
More CP/M utilities (see EC #15). Nine programs including D.COM, TYPEL.COM, ZCPR.LBR, EX.COM, USERPW37.ASM and more.

EC #18
Programming languages: COBOL, BASIC in many variations, FORTH, ALGOL," C". Most have library files with accompanying documentation and example programs; some also contain source code.

EW #1 - MS-DOS
June, 1986
MS-DOS Utilities: SCRNBLNK (screen blanker), LU (library utility, use to extract files from libraries on this disk), FSED.LBR (screen editor to replace MS-DOS's EDLIN), MBRAIN.LBR (creates a RAM disk in system memory), AUTOMENU (make your system menu driven), CAL.LBR (display calendar for any month or year), DIR-X.LBR (extended directory program; gives disk stats), ST.LBR (SuperType. Same as DOS TYPE program, but you can scroll up and down in file), VFILER.LBR (a disk management utility), SUNSET (sunrise/sunset calculation program) and AREACODE (displays the area code of states and major cities).

EW #2 MS-DOS
July, 1986
MS-DOS Goodies: PC-WRITE.ARC (word processor), PC-SPELL.ARC (a spell checker) and unpacking software. Documentation for these programs is included in ARC file.

EW #3
August, 1986

Not available.

EW #4C - CP/M
September, 1986

CALC.SYS (TPM-III/Valdocs) A simple four-function calculator program written in compiled RSI BASIC.

BRADFORD.LBR A printer enhancement program for Epson MX, RX, FX, Epson-IBM and Star printers). Similar to Fancy Font but easier to use.

V3SETUP.LBR (V+III Documentation) Contains extensive ASCII files that explain how to set up your hard disk and ramdisk under the new version of TPM-III that supports V+III.

ENVELO.TPM (TPM-III/Valdocs) Envelope address program works in TPM.

ENVELOPE.CPM (CP/M) A graphics oriented program to print envelopes. For QX series and CP/M B versions (works in TPM but doesn't look as nice).

N41.LBR (CP/M) A super number converter/cruncher/calculator. Great for those who do a lot of programming.

POOLQX.COM (CP/M) Full-graphics pool table simulation game. CP/M "B" series only.

QXRCPM0X.LQT (Text File) Bulletin Board Listing. The latest compiled listing of Epson bulletin boards.

CRLE.LBR (TPM-III/Valdocs) View and print Compuserv Run Length Encoded (RLE) formatted files on your QX under Valdocs 2.0 or Higher. These files contain digitized pictures and are found on Compuserve and many bulletin boards. A few sample pictures are included.

SUPERZAP.LBR (CP/M) File modification utility. The latest version of the SUPERZAP program for Epson QX-10/16 and CP/M. Edit or customize any file including program (.COM) files; view and edit disk tracks directly. Superzap repairs damaged disks and files and can un-erase files as well. Full documentation included.

EW #4M - MS-DOS
September, 1986

QARC.COM Unpacks archived files. Use it to get at the files packed on the disk.

DSEP.ARC Disk/File editor utility. Explore the depths of your disks with grace and ease.

PROCOMM.ARC SUPER TeleCommunication Program. Clones and Equity only.

POP-EPSN.ARC Resident pop-up printer utility. Manipulate your printer "on the fly". Any Epson-compatible printer will work.

RAMTEST.ARC Nitty-gritty memory test. Let's you know when jungle rot attacks your system.

DIAGS1.ARC Complete Diagnostic. Checks all features/options of IBM compatible computers.

ARC.EXE Archiving program. This is version 512, the newest and greatest. Use it to "arc" your backup files to save on disk space.

EW #5C - CP/M
October, 1986

NOTEPAD.LBR (CP/M-TPM) - Place handy note files on your disks.

PURSUIT.VAL (Valdocs) - Detailed instructions on how to set up V+III mail to call and log onto remote bulletin boards (BBS) via PC-PURSUIT.

ZCMD-QX.LBR [CPM] - Super upgrade package converts CPM "B" into a Super-DOS! Includes ZCPR2 and ZCPR3 features like multiple commands, drive/user search paths, direct (TPM-like) user area commands and much more.

CUREDEMO.SYS (Valdocs) - Functional demo program of the latest IPG release "QX CUREALL" which can recover any blown or Error 16 Valdocs+ file. A real "Swiss Army" utility for Valdocs users!

NULU151.LBR [Best in CP/M] - Latest version of the super library file utility including complete documentation.

V203UG.TQT - A listing from Rising Star of all user groups that have received Valdocs 2.03 for distribution.

LOTTO.COM [CPM] - A fun lottery (simulation) game.

VDE23.LBR [Best in CPM] - A very substantial public domain full screen editor, it has many word processor features.

QDIET.COM (CP/M-TPM) - Figures out your daily required caloric intake based on detailed data you supply.

QXRCPM03.LQT - The latest compiled listing (as of 10/1/86) of Epson bulletin boards nation-wide.

EW #5M - MS-DOS
October, 1986

AME86.ARC A CP/M 86 Software simulator. Lets you run CP/M 86 programs under MS-DOS without additional hardware.

TPARK1.ARC Automatically parks your hard disk head in a safe place after a set time limit.

QARC.COM De-arc utility to unpack archived files.

EQWHIP.ARC Automatically reports peripherals installed in your computer.

EZFRM10.ARC Form Editor and Generator. Create your own personalized forms for business and home.

KEY-FAKE.ARC Batch File Utility. Supplies keyboard input for programs run as a part of a batch file.

ZOOEX121.ARC An Archiving Utility. Runs twice the speed of the standard ARC utility, but uses its own file format for greater file compression.

PROM.DOC Instructions for Changing Your System Prompt. Complete Details and examples.

ARC.EXE Archiving program just released this October.

WORMS.DOC A guide to destructive programs and how to avoid them.

DOS-BATS.DOC Lists all bug patches for MS-DOS 3.0 through 3.2. Complete patching instructions.

EW #6C - CP/M
November, 1987

Special: Choose any three of EW-6C or EW-6M for $30.

CHRISTMAS SING-A-LONG (CP/M-TPM) - Gather your family and friends around your QX computer for an old-fashioned caroling session. Your computer comes to life humming Christmas songs while you sing the words displayed on the screen.

LEARNING MBASIC (Text Files) - A first BASIC programming step to software enlightenment. Articles published in newsletters scattered across the nation. Information and insights virtually unobtainable from any other concentrated source.

FUN AND GAMES (CPM and TPM) - Lively arcade action coming to life on the screen of your QX computer. PAC MAN, SPACE INVADERS, CHESS and even STAR TREK. Guaranteed to make a computer game junkie out of anyone.

FORM LETTERS (Text Files) - One hundred form letters on virtually every subject already written for you to doctor up with your own details and pop in the mail. All files are in PLAIN JANE ASCII, so any word processor (including Valdocs) can munch them up and print them out.

EGRAFPAC (Works Best in CP/M) - Fancy graphics routines that plot circles, boxes, spirals and other condiments through direct control of the 7220 chip inside QX computers. A must for any serious programmer.

EW #6M - MS-DOS November, 1986

FLICKER.ARC - A command file processor for graphics presentation. Create a series of pictures and sounds for entertainment or business presentations.

FSTFRM.ARC - Quickly format floppy disks, two disks at a time.

G-WHIZ.ARC - A file manager similar to WASH with built-in help from the function keys. Rename, copy, erase, etc.

GALAXY.ARC - An editor written in Turbo-Pascal.

GETDIR.ARC - A memory resident utility. Access any directory from inside an application program.

HD.ARC - Check out your hard disk. Measure speed and other parameters.

EW #7C - CP/M December, 1986

FONTSY.LBR [CP/M-TPM] - Super banner/sign maker program with several fonts with utilities and source code.

PROBE102.LBR [CP/M] - For the technically minded. Displays stats on the inner workings of your QX and its operating system.
AREACODE.COM [CP/M & TPM] - A fast utility gives localities are served by a given area code.

SHTQ16HD.DOC [NA] A tutorial that explains how to set up and partition your QX-16 hard drive.

CRUNCH22.LBR [Best in CP/M] - Crunch is a faster, more efficient way to store programs, data and text than SQUEEZE. This library includes CRUNCH, UNCRUNCH, and documentation.

UNARC10 .LBR [CP/M & TPM] - View and extract members from *.ARC files created under ARC512.EXE, an MS-DOS program that has replaced "Library" (.LBR) files on MS-DOS bulletin boards as the archiving standard.

NEWPUZ.COM [CP/M & TPM] A hidden "word puzzle" generator.

EW #7M - MS-DOS December 1986

704K.ARC Allows use of more than 640K of RAM in your computer, adds 64K to your computer by using memory normally not used. Complete documentation included.

87ERROR.ARC Watches your 8087 Co-Processor and reports errors. Documentation, ASM, and OBJ files are included.

ACE121.ARC A color editor with many features and windows.

ACEFILE.ARC A File Manager with many features.

ANSIEDT.ARC A complete ANSI FULL SCREEN EDitor.

ANSIKEYS.ARC This program enlarges the size of your ANSI.SYS and shows how to modify your keyboard for customization.

ARCA118.ARC ARCE124.ARC These two programs are companion files to ARC & de-ARC files. Some differences between ARC & QARC, but completely compatible.

ARCCAT22.ARC Catalogs archived files.

AST.ARC Astronomical program to plot stars.

ASSEMBLE.ARC A two-pass assembler written in Turbo Pascal. Assembles 8088/86 code. Documentation included.

ATOZ100.ARC A conversion program that converts .ARC files to the .ZOO format, available on EW-5M.

AUTODATE.ARC This program fills in the date & time automatically at bootup.

Used QX-10s Wanted!

We will buy quantity lots of 10 or more used QX-10 computer systems, price determined by general condition. All need not be operable. Terms: cash, no single unit purchases.

Star Technology Corp.
900 170th Road
Carbondale, CO 81623
303-963-1969

BRAND NEW FX-285 PRINTERS!

A limited quanty of factory-fresh Epson FX-285 printers with tractors and parallel interface, regular $799, now only:

$549 (plus shipping)

These feature a wide carriage, 9 wire print head, and 200 cps draft.

Polytronics
Box 234 - New Boston, NH 03070
(603) 487-2500

New and Reconditioned Epson QX-10 Computers!

NEW SYSTEMS COMPLETE WITH VALDOCS, CP/M AND FULL 1 YEAR WARRANTY!

QUANTITIES ARE LIMITED

Reconditioned QX-10's are in like new mint condition with a 60 day warranty. Disk drives are completely cleaned, belt tension adjusted, heads aligned and calibrated, disk ejector cleaned and lubed. Our QX's go through a 43 point check list before they are offered to you. Prices vary depending on condition.

QX-10 CPU and Disk Drive Reconditioning

Full CPU reconditioning $229; Disk Drive Reconditioning $80/Drive. CMOS Battery Replacement Kit $28. Complete QX-10 service available at reasonable prices.

Star Technology Corp.
900 170th Road
Carbondale, CO 81623
303-963-1969

The Official EW Clone

At $999.97, there's nothing else to buy.

Shop around. No doubt you can find MS-DOS systems priced somewhere between $500 and $600. But then you'll have to add extra memory because anything less than 640 Kbytes is becoming minimal these days. And chances are you need two floppies, not just one. And if you want to see what your system is doing, you'll need that "optional" monitor. Oh, yes, how about PC-DOS, the operating system that makes you absolutely compatible? Battery powered calendar-clock? Extra printer port? Can it auto-boot from the hard disk?

The Official EW Clone comes standard with all this, plus the amazing Ability software with a Lotus 123 compatible spreadsheet and full function data base management system that can take dBASE II files. And nearly 190 kBytes of carefully selected and tested public domain software with professionally prepared documentation, all on your pre-configured system floppy diskette or loaded on your formatted and configured optional 20 megabyte Seagate hard disk.

If the time to move into the MS-DOS world has arrived for you, we'll make it easy and quite inexpensive. The hardest work you'll do is take the system out of the box.

Standard Features:

- 100% IBM XT Compatibility
- IBM PC-DOS 3.2
- Memory 640 Kbytes
- Phoenix Bios
- Calendar Clock
- 150 Watt Power Supply
- Two 360 K Floppy Drives
- Two Parallel Printer Ports
- AT Configured Keyboard
- One Serial Port
- One Game Port
- Eight Expansion Slots
- Samsung Amber or Green Monitor
- Hercules Compatible Video Display
- Ability Fully Integrated Software

$999.97
Complete

Options for the EW Clone (and All Other DOS Compatible Computer Systems):

20 Megabyte Seagate Hard Disk Option
With Western Digital Controller **$450.00**

Turbo Option - Nearly doubles the CPU speed
(Keyboard Control - 4.77/8 mHz clock) **$100.00**

Internal Modems, Complete with QMODEM telecommunications software. These are Made by Leading Edge and can be serviced anywhere. First-rate, quality units. Plug the modem card in an empty slot, connect a phone line and installation is about done.

Leading Edge 1200 $129 ($149 List)

Leading Edge 2400 $299.00 ($349 List)

Software Available Separately:

IBM PC-DOS 3.2 $85.00

Ability Integrated Software $70.00

Polytronics Corporation

Box 234 **New Boston, NH 03070** **603-487-2500**

Finnegan's Flea Market

Epson World encourages recycling and believes cheap is wonderful. Advertise your new or used whatever here for wonderful prices. Rates are $2 per line (paid in advance, $10 minimum) per classified or $50 per inch for boxed ads.

WANTED, DEAD OR ALIVE - We buy used (working or not) Epson products. QX-10/16, PX-8, HX-20, all associated perpherals, printers & plotters. Call for pricing. SnyderScope (619) 442-2299.

EPSON PX-8 Software library, WordStar, Portacalc, Scheduler, ROM Chips and manuals. $39. Call Mike (813) 345-8890.

For Sale - QX-16 HD, New and in original FACTORY SEALED cartons. Best offer over $1100 by March 31. Fritz Schaller, 603-772-9091.

1000 Business cards raised

Printed w/logo:
One Color - $17.50 del.
Two Color - $22.00 del.

1000 #10 envelopes, commercial

White, flat corner printed:
One Color - $25.00 del.
Two Color - $32.50 del.

1000 Hi-white wove (20 lb.) bond,

Raised printed:
One Color - $35.00 del.
Two Color - $50.00 del.

DFS computer forms catalog -

hundreds of items. Only $2.00 for postage.

TERMS: Check with order.
Allow 4 - 8 weeks for delivery.

JALCO DISTRIBUTING
RFD #2, BOX 539-2 Norris
Epping, NH 03042
(603) 679-2445

EPSON QX-10 QCS hard disk, Valdocs versions 1.7, 2.0 and +, Valpaint with two mouses, many extras. Best offer takes it all. Also available, best offer: Epson Geneva with all software (WordStar, Calc, BASIC, CP/M, etc.) David Ahl, 12 Indian Head Road, Morristown, NH 07960

Frustrated because you can't find anything in the 868-page V+III manual? If you are, send $9.50 to Kuelke, 250 Hemlock Terrace, Kinnelon, NJ 07405 for the 29-page **Keyword Index!**

Epson QX-16 Software package. MS-DOS, CP/M-80, Valdocs, GWBASIC. New in UNOPENED box. $99.95. Call Mike, 813-345-8890.

Wanted - Working 512K Titan MS-DOS board with software, etc. Call or write - J. Mikkelsen, 74976 Aladdin Dr., 29 Palms, CA 92227 (619) 367-4831.

SOFTWARE - for your QX-10 and 16! For a copy of the current catalog, call or write: The Independent Programmers' Guild Route 1 - Box 34, Taos, NM 87571, 505-758-2361.

For Sale - QX-16 TURBO, 8 mHz dual CPU/floppy system including green monitor, keyboard and MS-DOS 2.11, Valdocs II, CP/M-80. Price $895 plus shipping. Call (212) 568-0299.

Epson PX-8 - Geneva computer w/software, books, complete: $225.00. Call Mike (813) 345-8890.

QX-10s Wanted - Quantities of 10 or more, no singles, please. Contact Doug (303) 963- 1969.

For Sale - Back issues of EW including a few of the rare June/July issues. Epson World (603) 487-2500.

One megabyte RAM disk for QX-10 computer systems. **No installation!** Just plug in & use with new TPM-III disk supplied. Complete review in May EW. $375 + p&h. Jalco Distributing, RFD #2, Box 539-2 Norris, Epping, NH 03070 (603) 679-2445

Switch Boxes & Cables

A-B switchboxes

JD8527-25P	2AB serial f. conn.	$29.95
JD8526-36	2AB Cent. conn.	$29.95
JD8531-25P	4ABCD Serial conn.	$39.95

Cables (W/Mtg. Screws, Shielded)

JD-001-AUL	IBM Printer 6ft	$14.00
JD-001-BUL	IBM Printer 10ft	$18.00
JD-001-12-G	IBM Printer 12ft	$20.00
JD-002-12	Cent. conn. 12ft	$20.00
JD-002-AUL	Cent. conn. 6ft	$14.00

Serial Cables

JD-003-12	m-m 12 ft	$20.00
JD-003-AUL	m-m 6 ft	$14.00
JD-004-12	m-f 12 ft	$20.00
JD-004-AUL	m-f 6ft	$14.00

Modem Cables

JD-006-AUL	XT & Hayes 6ft	$14.00
JD-007-AUL	AT & Hayes 6ft	$14.00

RS-232 Gender changers

JD-010ARS232	M/M	$ 5.00
JD-011RS232	F/F	$ 5.00
JD-012ARS232	NULL Modem	$ 6.00

CASH OR CHECK WITH ORDER; SHIPPING CHARGES ADDITIONAL. Enclose $5.00 for Shipping & Handling; overages returned-shortages billed.

JALCO DISTRIBUTING
RFD #2, BOX 539-2 Norris
Epping, NH 03042
(603) 679-2445

The Epson QX-10 User's Guide

by
Jim Hansen

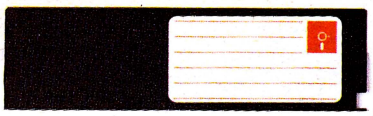
A fabulous 159 page book that describes every detail of your favorite computer, as well as the complete and only published history of the Epson Corporation. Discover details of your QX-10 never before revealed in such devastating detail! Chapters include topics on software, hardware, MBASIC programming, QX-10 hardware options, and much more, all written in easily understood ENGLISH! Nearly 100 photographs and illustrations!

Originally published at $17.95, now available with or without the author's genuine handwritten signature for only $9.95 (plus $1.00 postage). Order with any Disk of the Month and save the postage.

Epson World Magazine
Box 369 - New Boston, NH 03070
603-487-2500

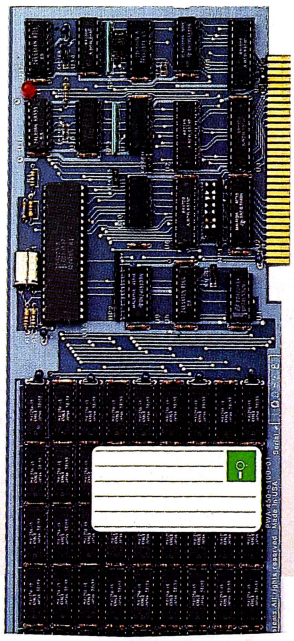
Think fast! Pick the better fit...

Our 5th Year Bonus! Mention this ad when ordering and get your choice of a V 20-8 (replaces 8088) or $20 off on your Battery Backup purchase!



FLOPPY DISK.

- Fills time between coffee breaks
- Makes a hard disk seem *fast*
- Your computer appears busy (even if you aren't!)
- Wears out moving parts



SEMIDISK Disk Emulator.

- Gets that job done NOW
- Makes a hard disk seem *slow*
- Maximizes your productivity with anything from databases to compilers
- Totally silent operation

...for YOUR demanding tasks.

SURPRISE! *Neither* is memory mapped, so they don't affect your precious Main Memory. *Both* retain data indefinitely - even with the computer turned off.

THE SEMIDISK SOLUTION. You could invest in a series of "upgrades" that turn out to be expensive band-aids without solving your real problem. Even those "Accelerator" and "Turbo" boards do little to speed up disk-bound computers. If your applications spend too much time reading and writing to disk (and whose don't?), you won't want to settle for anything less than a SemiDisk disk emulator. The SemiDisk comes in 512K and 2Mb capacity. More boards may be added to make up to an 8 Megabyte SemiDrive!

SPEED THAT'S COMPATIBLE. PC, XT or AT, if you need speed, the SemiDisk has it. How fast? Recent benchmarks show the SemiDisk is from 2 to 5 times faster than hard disks, and from 25% faster (writing) to several times faster (random reads) than VDISK and other RAMdisk software that gobble up your main memory.

MEMORY THAT'S STORAGE. Using our small external power supply, with battery backup, your data remains intact through your longest vacation or even a seven-hour power failure!

CELEBRATE WITH US! Now, SemiDisk celebrates its fifth birthday with a special offer for IBM-PC owners. Buy a SemiDisk now and we'll include an 8 MHz V-20 microprocessor (replaces the 8088) to make your new SemiDisk run even faster. Don't need the V-20? We'll take $20 off the price of your Battery Backup Unit!

	512K	2Mbyte
IBM, PC, XT, AT	**$495**	**$ 795**
Epson QX-10	**$495**	**$ 995**
S-100 SemiDisk II	**$795**	**$1295**
S-100 SemiDisk I	**$299**	**----------**
TRS-80 II, 12, 16	**$495**	**$ 995**
Battery Backup	**$130**	**$ 130**

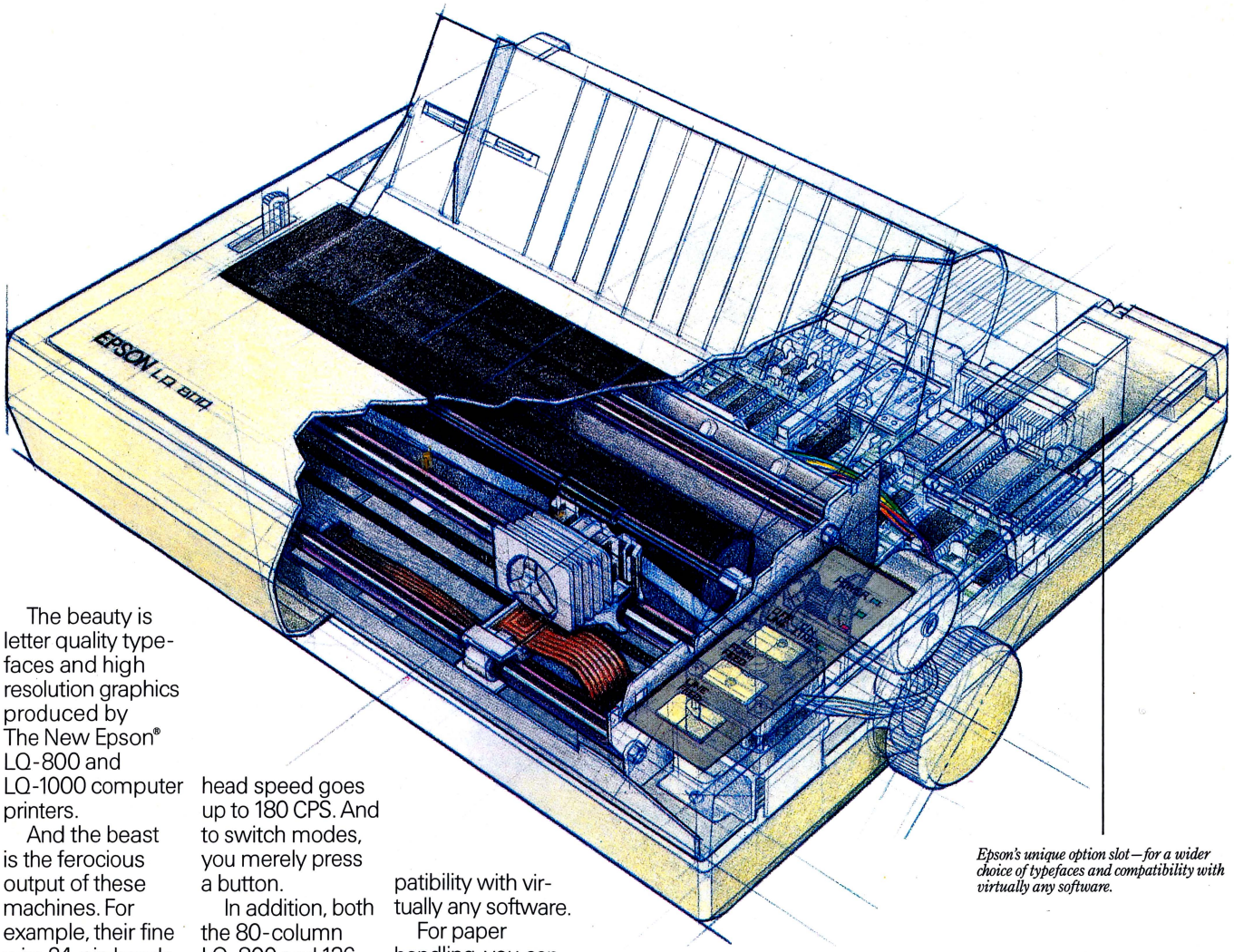
Someday you'll get a SemiDisk.
Until then, you'll just have to...wait.

SemiDisk

MasterCard VISA

SemiDisk Systems, Inc., 11080 S.W. Allen Blvd., Beaverton, Oregon 97005 (503) 626-3104

BEAUTY AND THE BEAST.



Epson's unique option slot—for a wider choice of typefaces and compatibility with virtually any software.

The beauty is letter quality typefaces and high resolution graphics produced by The New Epson® LQ-800 and LQ-1000 computer printers.

And the beast is the ferocious output of these machines. For example, their fine wire 24-pin heads create extremely high character resolution in the letter quality mode at a printhead speed of 60 characters per second. That's three times faster than the average daisy wheel.

In the draft mode, the printhead speed goes up to 180 CPS. And to switch modes, you merely press a button.

In addition, both the 80-column LQ-800 and 136-column LQ-1000 are extremely versatile. Not only are more than 200 typefaces already built in, but your options include a choice of "Font Modules" for even more typefaces and "Identity Modules" for compatibility with virtually any software.

For paper handling, you can choose either standard friction feed or an optional tractor or cut sheet feeder. And a built-in buffer gives you fast access to your computer while the printer is running.

Naturally, all this high technology would be useless if we didn't also offer high reliability. Which is why Epson comes with a full one-year warranty.

And the real beauty of the warranty is, you're very unlikely ever to have to use it.

For more information on Epson's full line of dot matrix, daisy wheel, ink jet and color printers, call (800) 421-5426. Or (213) 539-9140 in California.

EPSON

PRINTERS

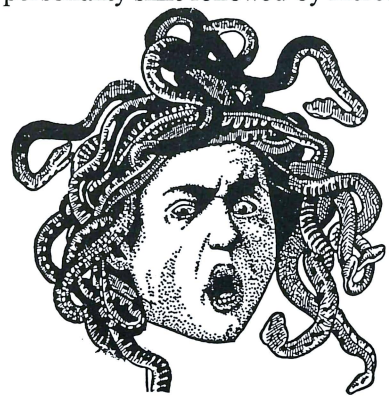
Epson is a registered trademark of Epson Corporation.

Midnight Tension Syndrome Reduced by Cellulose-based Information Dispenser

Epson World Magazine is the first specific identified and approved for non-prescription use by FDA and now recommended by the CARAPMBTIMFMTS.

Everyone knows the painful results of a severe attack of the Midnight Tension Syndrome (MTS). Not recognized by the medical profession until the late 1970s, an increasing national awareness has forced our federal government, under the watchful eye of the Committee for the Annihilation of Reoccurring Attacks and the Prevention of Many Bad Things Including the Much Feared Midnight Tension Syndrome (CARAPMBTIMFMTS), to find a cure for this malady.

MTS normally attacks individuals whose good graces afford them high tech appliances such as satellite television receivers, solar powered blenders and, amazingly, personal computers. The disease is progressive. The first sign of trouble is a slight personality shift followed by increased irritability. Within a few weeks the subject seeks isolation, often with stacks of manuals, beer cans, cold pizza and mounds of crumpled paper and notes nearby.



An unfortunate victim of MTS. EW cures cases like this in a matter of days.

The torment continues as sleeping patterns change. Torn sheets, ripped pillow cases and constant thrashing throughout the night are common. Many sufferers begin talking in their sleep. Spouses report hearing ASCII tables recited, sometimes in reverse order, while others have heard cries of panic and pain such as "UNDO! UNDO! Oh, NO! Not AGAIN! AHHHHhhhhh!" Subjects rarely recall these nightmares or offer explanations for them.

About 15% of those experiencing these nightmarish attacks reach the "somambulitisticus flakeouticus" stage. These unfortunate victims are fully engulfed, unable to perceive reality and sit on park benches for hours staring blankly ahead with arms outstretched and fingers moving, as if using some unseen computer.

Until recently there was nothing medical science could do for these poor unfortunates. But relief is now available. Yes friends, ALL who suffer from the effects of MTS can be saved from these tragic results! A simple, low cost, non-prescription strength dose of Epson World Magazine is all it takes. (Prescription strength "Epsonicus Worldicus Magazinicus Terrificus" is also available, but the same relief can be obtained by thoroughly reading EW twice a day for a month.)

Our exclusive combination of imported inks and papers, not to mention the easily understood high tech lingo gracefully spread amongst the pages of Epson World, will cure even the most painful MTS attack. Avoid this misery! Check your renewal date on your mailing label and renew promptly! *Your very life hangs in the balance!*

NEW PRODUCTS AVAILABLE! Now you can enjoy MTS-free living, a full head of hair **AND** become a computer genius, all without even trying! Order our exclusive Epson World Pillowcase set at only $19.97 plus postage. Convenient pockets prevent bunching and allow you to insert as many EW issues as necessary. Special fabric (developed at great expense) allows the full EW load to reach your skin and sink into your skull, right where it does the most good. Order today!

Epson World Magazine
Box 369
New Boston, NH 03070

YES, YES, YES! Enter my one year subscription to EPSON WORLD, America's largest magazine devoted exclusively to the Epson community. I'll receive 12 issues for just $24.97, an amazing savings over our regular jacked up newsstand rate.

Bulk Rate
US Postage
PAID
Manchester, NH
Permit No. 1926

___$24.97 check enclosed
_____ MC _____ Visa
Card # _____
Exp. Date _____
Signature _____

Please mark any address changes on the label above. Canadian rates are $33.97(US); other foreign $48.00(US). These outrageous rates are necessary because of postage and hand stuffing of magazines into mailing envelopes required by the post office.